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JUNE • 1948

FRUIT GROWER



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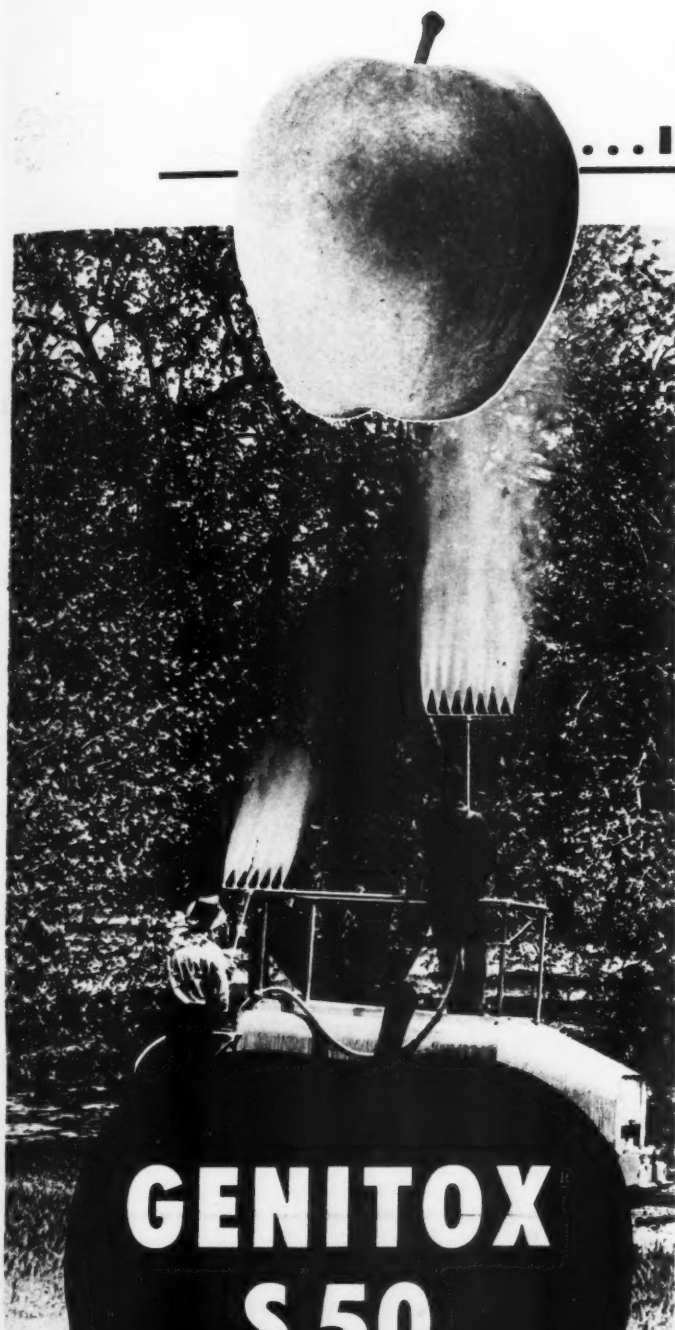
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JUNE, 1948

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HYATT ROLLER BEARINGS

JUNE

1948

VOL. 68

No. 6

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THIS MONTH'S COVER

Attractive fruit of the high quality that is pictured on our cover presents no marketing problem. We wonder how many of our readers can identify this fine variety. Why not drop us a line if you can tell us what it is!

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AMERICAN FRUIT GROWER

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LETTERS TO

Growers Plan For Better Packaging

Gentlemen:

When I was on the West Coast at Christmastime I saw several apple bagging machines. I believe you could stir up some interest with an article now about pre-packaging apples and peaches. It seems to me that the worst trouble we now have is with our package, and I believe growers are going to have to do something to get the fruit on the market in better condition if they are to meet the competition of other fruits.

W. Frankfort, Ill. Frank E. Trobaugh

There is no doubt that the question of packaging fruits looms large before all fruit growers today, and Reader Trobaugh will be interested to know that AMERICAN FRUIT GROWER is devoting a large part of its editorial content in the July issue to the subject of profitable packaging.—Ed.

Dear Sir:

I can see the need for changing the time-worn ways of packaging apples to meet the demands of trade to pack fruit in such a way that the housewife can carry it easily. But I have had a problem locating the machinery to do the trick.

I would like to get a machine which would grade and pack my fruit in 5- or 10-pound sacks. Do you know where such machinery might be found? If you do, would you please send me the information?

Benton Harbor, Mich. Fred Antes

Several machines for bagging fruit are now on the market. We have sent a list of the manufacturers to Reader Antes and will be glad to supply a similar list to any of our readers who will send a self-addressed stamped envelope.—Ed.

First American Vineyard

Dear Sir:

In the feature "Ramblings of a Horticulturist" in the April issue of AMERICAN FRUIT GROWER, William Penn was credited with establishing the first vineyard in America.

Several years before 1680 two Capuchin monks, Padres Antonio de Arteaga and Garcia de Zuniga, established a vineyard of European grapes at the Mission of Our Lady of Socorro (Socorro, N.M.). The exact date of the planting is not known, but available records show there was a vineyard planted at the mission before it was abandoned in 1680 at the height of the Indian uprisings in New Mexico.

In the northern part of New Mexico there is a small group of grape vines that is a source of speculation. The vines (*V. arizonica*?) are growing at the base of some pre-historic cliff dwellings and are planted in a fairly straight line. Their condition indicates that they are quite old and have been burned several times. Whether they grew wild there, or whether they were cultivated by the cliff dwellers is an unsettled question.

State College, N.M. Arnold Krochmal

Walnut Grafting

Dear Sir:

I would appreciate some information on the best methods of grafting walnuts.

F. L. Cizner Bonner's Ferry, Idaho

AMERICAN FRUIT GROWER

THE EDITOR

Several methods of grafting walnuts are illustrated and described in *Farmers Bulletin 1501 F*, available for five cents from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

The best method to use varies with locality and soil conditions. According to J. C. McDaniel, Secretary of the Northern Nut Growers Assn., Inc., some nurseries in Washington use a T bud, with a very long vertical cut of the "T" incision on the stock, to allow drainage below the bud, and wrap it with a large rubber budding strip. In Tennessee, a patch bud, a Jones modified cleft, or a bark graft are used. All of these are illustrated in the *Farmers Bulletin* mentioned above.

The Eastern black walnut is the common stock in eastern states, while western Oregon and Washington nurserymen employ either the California black walnut, Persian (English) walnut, or hybrids.—Ed.

Let's Chat Some More About the Lemon Pippin

Dear Sirs:

Two years ago, on a farm nearby, I discovered an old tree which is known to be more than 90 years old and in a nearly exhausted condition. The owner is nearly 84, and he did not know what variety the fruits were, so I sent a sample to Washington, D.C. They identified it as a true Lemon Pippin. Its shape is very similar to the old sheep nose, except that at the small end it has five or six ridges like a banana. The apples are of good size, and ripen from August to about September 10.

Last year I grafted about a dozen of these trees, and if anyone wants to write and pay for the trouble of mailing, I would gladly send him some scions.
Lyons, N.Y. H. C. Pickering

Dear Sir:

Forty or fifty years ago I lived on a farm in Floyd County, Va. There was a very fair orchard on the place, and it contained varieties of apples such as the Cannon Pearmain and one known locally as the New York Pippin. My impression is that this was the same variety that is now called the Albemarle Pippin. Dr. Thomas Walker, a surgeon in the Revolutionary army, brought the original grafts back from New York State. They were planted and did well in Albemarle County, Va., hence the name.

Among other apples in the orchard was the old type of Smokehouse apple which was a great favorite for cider and apple butter. There were also forty or fifty trees in the orchard of the variety known as lemon apples. These were lemon color and of medium size. They were not particularly good to eat, and I do not know whether they were suitable for cooking or not.
Charleston, W.Va. J. E. Cannaday, M.D.

Apricot Variety

Dear Sirs:

What is the origin of the Perfection variety of apricot? Is it an annual bearer?
Hanford, Calif. Alfred Anderson

The Perfection apricot originated as a chance seedling in the State of Washington on the home grounds of Mr. and Mrs. Goldhick. It has been an annual bearer as grown in the variety block of the University of California at Winters, Calif. According to pomologist Claron O. Hesse, the variety is not grown commercially in California.—Ed.

JUNE, 1948

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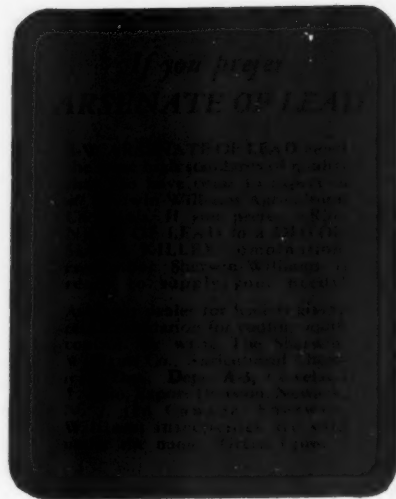
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AMERICAN FRUIT GROWER

JUL

WHAT DOES THE RESEARCH AND MARKETING ACT MEAN TO THE FRUIT GROWER?

By C. O. BRATLEY, U. S. Department of Agriculture

Surveys show that one-fourth of our deciduous fruit production never reaches the consumer. Here is how R&MA would overcome this and other marketing problems.

THE RESEARCH and Marketing Act of 1946 is an encouraging step toward solving some of agriculture's marketing problems, but it would be a serious mistake for me or anyone else connected with its administration to imply that it is a panacea for the fruit industry or any other. One of the main purposes of the Act, to state it simply, is to make abundant agricultural production in this country accessible to more and more people.

In passing this new legislation, Congress made clear the need for bringing the American marketing and distribution systems into gear with the increased ability of American farmers to produce. The action also focused attention on the increase in capacity of the American stomach when people have the money with which to buy the things they want.

In the past, the U.S. Department of Agriculture has had only about \$1 million for research on marketing, but much of it was earmarked for the development of grades and standards. Now, with more clear-cut authority than ever before and twice as large an appropriation, it is possible to get down to business in finding the causes of and cures for some of the more pressing marketing and distribution problems. As a basis for effecting or recommending improvements in the field of marketing, this first year's work is largely aimed at obtaining new and basic information along several lines. These include where and how to expand market outlets; how to reduce marketing costs and margins; how to develop new standards and grades, where necessary, in order to improve the marketability of farm products; how to improve and encourage wider use of better marketing methods, facilities, and equipment; how new processing and packaging techniques can be used to minimize waste and increase salability of farm products, particularly

in retail stores; and how to collect data and analyses of consumer demand and preferences.

In addition to the usual process for developing research programs, the Act provides for specific commodity advisory committees who, as representatives of producers, industry, government, and science, assist in the selection of lines of research to be done. Two such committees represent the fruit industry, one for citrus and the other for deciduous fruit. There is also a committee for tree nuts. It is suggested that anyone in the fruit business who has a problem which merits public research should present it to the proper advisory committee for action.

A number of problem areas are being explored this year which should be of direct interest to the fruit industry. The objective of one

project is to determine, on a nationwide basis, the potential outlet for foods as indicated by current dietary habits of families in this country. Recent spot checks have shown that there is a serious lack of vitamins A and C in the diet, and these vitamins are largely supplied by fruits and vegetables. A companion project is to find out what a good diet is according to age, occupational, and other groups. Preliminary results of this work should be forthcoming in a relatively short time.

But results of a survey or any other kind of research effort, no matter how gratifying to the men who produced them, are of little real value unless they are widely and effectively applied. A rather far-reaching effort is being made by the Federal Extension Service in co-operation with the State extension service to disseminate consumer education, the purpose being to expand consumption of healthful foods, particularly of locally-grown produce to improve diets of the people in the areas where the produce is grown.

Another important factor in food distribution is that the cost to the consumer must be kept at a minimum, yet consistent with a fair return to the producer. Several projects in this field have been approved, the first of which entails a review of the entire field of costs and margins—from the producer through the transporter, wholesaler, jobber, and retailer on down to the consumer. Where costs seem excessive, an attempt will be made to get whatever co-operation is needed to lower them.

A second study aims to reduce marketing costs through the development of more efficient marketing facilities. Cities have grown up around many of our original terminal markets in such a way as to stifle expansion or modernization. Produce passing through such markets is handled slowly and inefficient-

(Continued on page 19)

HERE ARE THE FIGURES

\$9 million has been appropriated for the administration of the Research and Marketing Act during the current fiscal year. This figure will be increased to \$61 million in five years.

Allocation of the funds for the current fiscal year is as follows:

\$2½ million (Title I, Section 9) direct grants to the State Experiment Stations for all types of State or co-operative regional research. Not less than 20 percent spent for marketing research and services.

\$3 million to USDA [Title I Section 10 (a)] for research on new and wider outlets or uses for agricultural products.

\$1½ million to the USDA [Title I, Section 10 (b)] for co-operative research with the States on virtually any kind of agricultural research other than new and wider uses.

\$2 million under Title II to the USDA for developing a sound and efficient system for marketing agricultural products.

The Title II funds may be used either directly by the USDA, or they may be assigned, in part, on a matching basis to State departments of agriculture, State bureaus of markets, State agricultural experiment stations, or extension services, and any other State agency that can logically co-operate in marketing research or service, or in educational programs designed to stimulate more effective utilization and greater consumption of agricultural products.

Annual appropriations must be approved by Congress each year, but the amounts authorized in the enabling legislation signify the potential effect this Act might have in the future.



Above—Open trees and good spacing help solve the marketing problem at its source. Left—Marketing begins with the blossoms, when proper thinning will improve quality.

MARKETING BEGINS IN THE FIELD

Quality Is A First In Marketing. And Quality Depends On Field Practices

By H. B. TUKEY, Michigan State College

MARKETING is a "grass roots" problem. It begins when the trees, vines, and berry plants are set. Some of the marketing problems of 1947-48 began 30 years ago when the wrong sites were selected and the wrong varieties were planted. Many more of those problems arose in the pruning, fertilizing, spraying, and harvesting operations during the growing season of 1947.

It is because the quality of the fruit offered for sale is so important that it is natural and proper for growers' meetings on advertising, grading, merchandising, and pricing often to settle down to matters of production, although fruit growers have been criticized for doing so. If there is a good grade of a desired product to sell, there is little or no trouble in selling it; but when the product is inferior and undesired, the producers are left begging for help.

This is a point too often overlooked because the producer too frequently fails to carry the product of his efforts clear through to the consumer's hands. It is as though an automobile manufacturer were so busy pushing cars off the assembly line that he forgot to follow through to the consumer. If the producers of fruit could know the desires and the reactions of the

consumer, many of the problems which originate in production would be close to solution. There ought to be more consumer surveys made by producers, and more producers should visit markets to see what the produce looks like when it is offered for sale. The minds of orchardists should carry from the blossom bud clear through to the satisfied palate of a pleased consumer.

But to get down to details, the biggest need in the fruit business today is an orderly, regular supply of uniform,

high-quality fruit—something that can be counted on in the trade and by the consumer. To achieve this, the first step is selection of the variety itself. Considerable progress has been made in the last 25 years in standardization of a few successful varieties and in the elimination of others. The McIntosh variety now dominates eastern apple production; the Delicious commands the over-all production of the nation; and about half of the apple production of Michigan is of the three

(Continued on page 25)



A good spray job is essential in producing marketable fruit.

AMERICAN FRUIT GROWER

where Santa Claus comes in June

By J. GILBERT HILL

SMALL PATCHES of blackberries which, if combined, would not cover more than one square mile of land, are pouring an estimated \$70,000 a year into one small Oklahoma town each June. And the story behind this blackberry business is a co-operative marketing association so effective that there is almost a problem of keeping up with demand.

The fame of blackberries grown in McLoud, Okla., was probably first established about 56 years ago when W. R. Barnett, a farmer living four miles south of there, ordered some plants from an Ottawa, Kans., nursery. Barnett's neighbors often came around on Sunday afternoons during berry season to learn about berries, eat a few, and probably take home some plants to start patches of their own. Soon there were patches all over the country.

A few farmers tried to sell the berries. They would pick a load one day, haul it to Oklahoma City, and stand around on the streets or at the public market looking for customers. The

er received a check, the amount covering the average price paid for berries on the previous day, less 20 cents a crate sales charges. Some crates may have sold high, some low, but all growers got an equal break on that day's market. Unused sales charges were divided at the end of the year, based upon the number of crates delivered. Barnett scorched the telephone wires keeping track of big buyers, truckers, wholesale houses, chains,

and other handlers of berries. Soon there was competition to buy, and farmers could plan to cultivate their berries because they knew they could sell them.

Blackberries grow on land which is too worn out to produce cotton any longer. They grow best down behind the Black Jack oak trees protected from the wind, and respond with startling productivity to use of barnyard manure as fertilizer.

Through the years the McLoud berry, now thought by experts to be the Lawton, has been selected and purified. (Continued on page 29)



berries did not move, and the venture usually ended in disappointment for the growers. To solve this problem, in 1939, J. A. Barnett, son of W. R. Barnett, organized the McLoud Blackberry Growers' Association along simple lines. The farmers provided the original capital. The first season, members delivered their berries to Barnett's sweet potato shed which was empty at the time. There they were labeled, graded, and sold.

The next day after sale, each grow-

The whole family can help with the berry harvest, since the fruit ripens during the children's summer vacation. These photos show how berries are picked near McLoud, Okla.

"MARKETING, AS I SEE IT"

A PANEL DISCUSSION

TODAY AN ASTOUNDING ARRAY of new, competing products is vying for the consumer's food dollar, and producers of fruit must modernize and improve their marketing systems.

In line with this, AMERICAN FRUIT GROWER has asked outstanding growers to discuss some of the more vital marketing problems. Every forward-thinking grower will be interested in their progressive ideas.



HERE ARE SOME POINT BY POINT SUGGESTIONS

By DONALD F. GREEN
Chazy, N. Y.

ECONOMIC conditions within this country are changing so fast it is difficult to put a finger on the most important marketing problem. We are confronted with complex situations in marketing apples which require correlation of thought and action on the part of growers, marketing men, and consumers.

Well up in the list of problems is that of maintaining quality and appearance of the fruit when it is placed in the housewife's hands, whether it be fresh or processed. Wartime packing and handling has become a habit—and a bad one. Mrs. Consumer should not have to look at uninteresting displays of fresh fruit which is poorly graded, carelessly handled, or immature; nor should she open a can of processed fruit which has poor flavor or, oftentimes, a slightly musty odor. Many growers of fine fruit consider their jobs well done when the fruit is placed in a cold storage or delivered to a buyer, but their interest

should extend further if they are to profit from fruit growing in the next few years.

Mr. Grower should look into, and study, the intricate details of marketing, and offer suggestions for betterment. He should realize that there may be lucrative markets in his own home town and surrounding area. Many rural families, who formerly had backyard orchards and were forced out of fruit growing by bugs and disease, are hungry for apples. Such families cannot afford to buy 2 pounds for 25 cents. Offer them, through the local retailers, a full box of good fruit at a fair price. The retailer will be happy with a smaller margin because he has no loss in spoilage in this way of selling. The processors should also be encouraged to place a quality product on the market by supplying them with fruit selected especially for their purpose—graded to their exact requirements.

The last season has brought forth another problem. Last fall the market begged for good fruit and very little was offered. Now, the good fruit that was held back is no longer inviting to Mrs. Consumer. We should know our market contacts well enough to have confidence in their judgment as to when to sell, the type of pack-

(Continued on page 23)

YOU CAN'T JUMP TO AN ANSWER

By D. B. PERRINE
Centralia, Ill.

PERHAPS A group of etymologists should be asked for the meaning of the word "marketing." It seems logical to believe that its original meaning was the buying, selling, or trading of goods upon a particular market; whereas it now can be used to cover the entire process by which goods are transferred from producers to consumers.

When one asks the question "what is the most important marketing problem?" he is covering a tremendous territory. Many people are inclined to blame an unsatisfactory market price for a certain commodity upon some defect in marketing when the low returns to the producers may have been the result of other causes. In fact, most producers of fruit never think about a "marketing problem" in a season when their products sell well; but when the reverse is the case, they are inclined to assert loudly that something is rotten about the entire marketing system. Actually, their products may have moved into consump-

AMERICAN FRUIT GROWER

tion in a much more orderly manner in the year of the lower market, and the poorer returns may have resulted from large increases in supply, lower purchasing power of consumers, increased competition from other food stuffs, or any of a dozen other reasons, all affecting the market, but not materially altering the marketing of their fruits. However, it should not be assumed that weaknesses in the marketing system are unimportant simply because there are additional factors which also affect the price of any fruit. (Continued on page 24)

WE MUST IMPROVE THE PRODUCT!

By GRANT MERRILL
Red Bluff, Calif.

ONE REASON it is hard to define marketing is because production and marketing are closely interwoven. The phrase, "well-grown fruit is half sold," expresses, in a few words, the idea I am trying to convey. In the production of all fruit there are three general grades: the great mass of standardized production, a few extra-quality packs, and a few low-grade packs. The consumer looks to the great quantity of standardized production for most of her needs. We need to improve this "standardized production" (usually the U.S. No. 1 grades of the most common sizes) all the time, so the consumer gets such a good product she will come back and buy some more.

By means of laws, regulations, marketing agreements and other such devices, the growers often try to prevent the lower grades of fruit from appearing on the market. We do not want the consumer dissatisfied. We want her to come back for more, and we do not like the price-depressing results of these low-grade commodities.

It may surprise some growers to learn how much the low-grade product reduces consumption. I have seen low-quality fruit—too green, too small, poorly colored, or with many blemishes—get into the retailers' stands and remain there for days. The consumer will not buy it. The retailer will not buy any better-quality fruit until he gets his money out of the fruit he has on hand; thus, the effort that the grower spends on eliminating these low grades will be well worthwhile.

The most profitable fruit is, of course, that of the top grades—the few larger, or better-colored, or better-matured unblemished fruits. This is so obvious that it is surprising so little fruit of this quality is produced.

(Continued on page 22)

"DISTRIBUTING" AND "SELLING" ARE NOT THE SAME

By H. L. MANTLE
Painesville, Ohio

THE MATTER of marketing farm crops, as with other commodities, has gone through a rapid series of changes in the last decade. There is a decided difference between dividing out a product to clamoring purchasers when there is not quite enough of the article to go around and that of attempting to sell the whole of a product at a profitable price when the product exceeds the usual demand.

Today some farm products find themselves in the first class, while the growers of fruits and vegetables generally find that their products are in the second class. While our payrolls are still high, and a lot of money is in circulation, there are many more other items clamoring for the would-be purchaser's favor. The result is that an ample supply of fruits and vegetables is, in many cases, meeting with a resistance to a satisfactory movement at fair prices.

To correct this situation will require at least two positive things: first of all, a high-quality product, properly handled all the way along the line so that the ultimate consumer gets a high-grade article at the time of purchase; second, the generous use of good common sense in devising an effective method of presenting the merchandise in an attractive manner—not only to the intermediate handlers, but also to the final consumer.

NOT OVERPRODUCTION BUT UNDERCONSUMPTION

By W. H. DARROW
Putney, Vt.

STATISTICS SHOW that the average apple production in the United States has decreased slightly during the last 25 years. In the same time there has been a substantial increase in the population of the country. This would indicate no overproduction of apples, but rather an underconsumption of them.

The demoralized condition of the apple market during the last few months has caused growers to realize what might happen if a larger-than-average apple crop should be produced in the next year or two. Experts say that there is little hope of much increase in apple exports for several

years to come. Hence, an increased domestic use of apples or apple products is essential for the orderly marketing of a large apple crop.

Apples and apple products have had very little advertising and promotion as compared with many other foods—especially such fruits as oranges, grapefruit, and bananas. Thus, many people have decreased their consumption of apples while they have increased their consumption of the other fruits (or their products, such as juices). If the apple growers of the country should spend as much money during the next few years in advertising their product as the citrus industry has spent in the last few years, I believe there would be no serious apple marketing problem for some years to come.

However, I look upon the orderly marketing of a crop as the disposal of that crop (through different channels) to the various purposes for which it can best be used. This should be done both with a profit to the producer and an advantage to the consumer.

(Continued on page 22)

LET'S PULL TOGETHER FOR MARKETING SUCCESS

By CHARLES MORRISON
Zillah, Wash.

THE TERM "marketing" includes all of the acts and services required to place fruit in the hands of the ultimate consumer after harvesting. It includes grading, packaging, transportation, storage, refrigeration, advertising, pricing, and selling at all the various levels, including that of the retailer.

Three of the fundamentals of successful marketing, i.e. good quality, a fair price, and dependability of operation, seem to carry through from the simplest form of marketing, in which the producer deals directly with the consumer, to the most involved systems such as growers who are far from consuming centers must employ.

Of these, quality is most important. How to get it, and how to keep it until the product is consumed, is in my thinking the foremost problem. In this respect, it is difficult to tell where the responsibilities of producing end, and where those of marketing begin. There really is no definite division point, for the two are interdependent—the success of producer and marketer depending upon quality production plus intelligent marketing. This includes all of the services that the term involves.

(Continued on page 23)

NATIONWIDE FRUITS

CITRUS

● Quick decline, a virus disease of citrus trees, is under intense investigation in California. Between four and five thousand trees have been planted for use in studying the disease, most of them being budded trees—Valencia on sour root. Symptoms do not show up on the one- or two-year-old trees until about 15 months after the first inoculation so progress has been slow. Some experiments have been made with smaller trees, and the research workers are hoping that, after they are inoculated, the symptoms will show up more quickly than on the larger trees.

The symptoms of quick decline disease are many, and they may develop slowly or appear suddenly. The visible symptoms include a heavy set of fruit prematurely colored, the turning of the older leaves to grayish green or bronze, stemming of the new growth, and further yellowing of the foliage before dropping.

Accompanying these visible symptoms are the underground changes such as a sloughing-off of the feeder rootlets, rotting of the small roots from their outer ends inward, and a reduction or complete disappearance of the starch supply in the roots.

"Collapse" describes the second type of symptom, and apparently normal trees will suddenly wilt. The trees will retain their dry leaves and fruit, but in a few days may die or will look dead. Many trees with this type of symptom die while a few may develop short, upright leafy twigs on the limbs which have not completely died. However, these trees are usually unable to thrive and will die later during a period of high temperatures.

Other research has been made to try to determine what rootstocks are not susceptible to the virus, and sour and sweet orange along with Cleopatra Mandarin have been tested. The experimental trees include all the species, varieties, and hybrids of citrus obtainable. Inarching and bridge grafting are other attempted methods for saving decline trees, but there has not

been time as yet to judge the success of such methods.

The Riverside Experiment Station is conducting tests in the experimental plots to determine what part insects have in spreading the disease. In Brazil, Tristeza, a disease similar to quick decline, has been under observation, and experiments have indicated that an aphid is the virus carrier. Such information has given impetus to experiments in California, where an aphid is present similar to the one found in Brazil.

BERRIES

● The Chehalem blackberry, a new variety especially suited for freezing, has been developed at the Oregon State College Experiment Station, according to Sam H. Bailey, Station writer. It is recommended for trial planting in Oregon and Washington.

The Chehalem is a cross between the Santiam and the Himalaya, and its outstanding characteristic is its

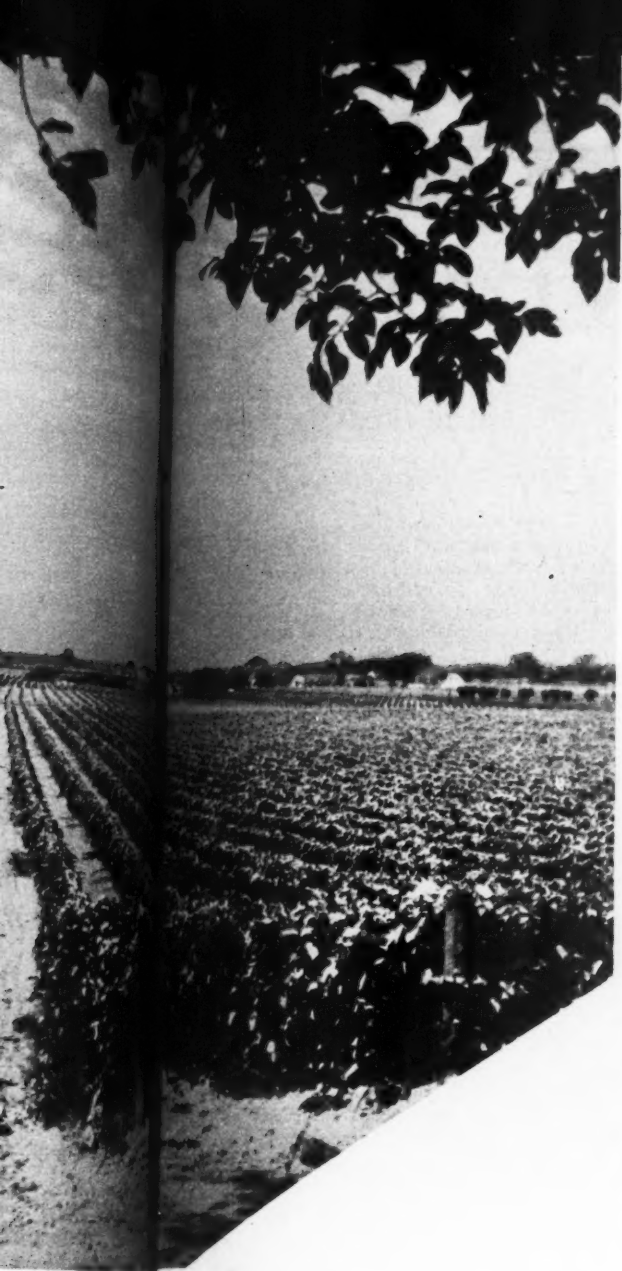
bright, black glossy color, which is retained in both freezing and canning. The flavor, which resembles that of the native trailing berry, is also retained in the frozen pack but is partly lost in the canned product.

The new berry ripens from 5 to 10 days after the Boysen and up to the beginning of the season for the Evergreen variety. Berries are slightly smaller than Loganberries and firm enough to keep shape after freezing.

● Something new has been added in the way of strawberry varieties for commercial freezing. It is the Robinson, a comparatively new variety which was developed in the southwestern part of Michigan. This large, bright scarlet berry is round to conical in shape and has a glossy appearance. The color is more than skin deep as shown by its rich red juice.

James Moulton of Michigan State College claims that many consumers prefer its mild sweet flavor and high vitamin C content. Robinson produces a good yield and is already being grown in large quantities in Michigan.

AMERICAN FRUIT GROWER



GRAPES

● The grape flea beetle is an enemy to be conquered without delay. In some vineyards it has cut the yields in half and in others all the fruit has been destroyed.

The larvae of this beetle grow and thrive in wild grape vines, and when they come out of winter hibernation, the insects fly or are carried by the wind as far as one-half mile into cultivated vineyards.

Removal of the wild vines, within a one-half mile radius of the vineyards, is an effective means for keeping the pest under control. Late May or June is the best time for this job so that injury can be prevented during the following spring.

Once the beetle has gotten onto the cultivated vines, it may be controlled by the use of DDT. Experiments conducted at the New York State Agricultural Experiment Station have indicated that 1 pound of DDT in 100 gallons of water is quite effective in ridding the vines of the adult beetle.

● Grape vines are living high at the New York Agricultural Experiment Station—up where there is more sunshine and air. Prof. Nelson Shaulis of the Station reports that vines yield more grapes on seven foot trellis than on those which are 5 feet high. Pickers will have to reach for the grapes, but they seem to prefer that to stooping.

Prof. Shaulis also recommends the umbrella system of training rather than the Kniffen system which is generally used in that area. The two systems are similar in that two wires are used in both, but in the umbrella system the wood left after pruning is looped over the top wire and only tied to the lower wire.

Other suggestions made by Prof. Shaulis were to leave more buds, which will improve both this year's and the following year's crop, and to renew vines more frequently.

APPLES

● Apple scab got the upper hand in New York last year because spraying was held up by weather conditions—growers could not get their spray rigs through their orchards. Dr. J. M. Hamilton of the New York State Agricultural Experiment Station attributes this to the fact that spraying equipment is not keeping pace with the progress being made with pest control. Growers now need equipment which is fast and light—they need rigs which can get through an orchard in any kind of weather.

New pesticides are doing their bit to improve spray equipment, but the rest is up to the engineers. Dr. Hamilton says that the experiment stations and the industry will have to get together and help the farmer to cut production costs and solve his labor difficulties by giving him a more efficient spray machine.

● There are many advantages to mulching in apple and pear orchards. It is an effective means for weed control, it conserves moisture, it prevents the running off of water helping to check erosion, and it retains snow which protects the roots against damage from winter cold. Mulching will also improve the physical condition of the soil and keep the micro-nutrient elements ready to be used.

Dr. H. B. Tukey of Michigan State College defines mulch as any coarse material, such as hay, straw, or sawdust, which will destroy or reduce weeds if enough is placed under the trees. It may be necessary to add mineral nitrogen to sawdust, which has a low nitrogen content.

(Continued on page 28)



BY GOLLYS, this is one of them months, ain't it? Makes yuh just wanta up an' do somethin' fer humanity. Trouble with most folks, though, is that before they can really get up an' do somethin' fer humanity, they git to feelin' lazy, and decide to let somebody else do the doin'.

Speakin' of doin', I hear the Washington State folks have pooled all their advertisin' funds for one big program to cover all the fruits. Saves a lot of money that way! Besides that, they're savin' a quarter of a million dollars in dormant spray materials this year, accordin' to a feller named W. J. O'Neill, some bugologist in Wenatchee. He says that their spray programs out there have cut the 13c-per-apple-box cost of sprays in half.

Heard sumptin' yesterday that wuz news to me. A feller wuz sayin' that a body'd better be careful fertilizin' raspberries and grapes so's he gets the fertilizer spread out wide around 'em. He says their roots grow out as far as 25 feet away from the crowns and stems, 'n' they all need fertilizer. Jehoshaphat, that's a lot of roots.

Read sumptin' interestin' some time ago—last winter, I think it wuz—about Nebraska. It said that way back in 1850 Nebraska wuz the most important fruit growin' State in the Union. And the joker wuz that in 1830 nobody believed that fruit would grow out Nebraska way at all. Just shows yuh can't never tell about the future. Guess that's a good thing!

By nation, they sure use a lot of chemicals for their pre-blossom scab spray around Winchester, Va. Wuz readin' t'other day that they used about 5 million gallons of sulfur compound solutions there this year. That's a whoppin' lot of stuff, ain't it?

Yuh know, I wuz talkin' with a USDA man t'other day, and he said he wuz warnin' everybody to be careful usin' these new-fangled chemicals. He said yuh want to know all the "hazards and limitations" of 'em before you use 'em. If you're in doubt, check with your Agricultural Experiment Station. I always read the labels pretty close, myself!

So long, neighbor.

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GROWER

JUNE, 1948



- Adverse weather upsets crop prospects
- Traveling Laboratory Interests N. H. Growers

GEORGIA, May 21—Unfavorable weather is playing its part in making the already short Georgia peach crop shorter. First, continued rainfall during the blossom period adversely affected the set of fruit; second, the heavy freeze of late March killed the entire peach crop in many orchards; and lastly, the high winds of early May knocked off much of the fruit in the remaining orchards which had a partial crop.

One bright spot in the Georgia peach picture is that the crop in the Fort Valley area is reported to be the cleanest produced in 30-35 years. This freedom from worms is primarily due to the widespread use of benzene hexachloride.—*E. F. Savage, Ga. Agr. Exp. Station, Experiment.*

IOWA, May 18—The crop conditions may still be described as "spotty." Many orchards had no more than three or four days in which bees were actively pollinating.

One noticeable growth condition is the fact that petals on apples and pears and the shucks on fruit of the peach, plum, and cherry type have persisted longer than most years; in fact, even at this date, a few varieties of apples could take a late calyx spray with assurance of a lead deposit in the calyx cup.

Although the weather has been comparatively cool to date, we have had rainfall in nearly desirable amounts, and only a few growers have reported seeing scab.—*W. H. Collins, Sec'y-Treas., Iowa Fruit Growers' Assoc., Des Moines.*

MAINE, May 21—Adverse weather conditions prevail in Maine. As of this date all of the orchard sections have been drenched with rain. Nearly four inches of rain have fallen since April 30th. Weather conditions have been opportune for scab development, although temperatures have averaged 40-45 degrees.

The Maine State Pomological Society, in co-operation with the Extension Service, is holding a series of six twilight orchard meetings during the second and third weeks in June. Interest is keen in automatic spraying devices which save labor and time.—*Rockwood N. Berry, Sec'y, Maine State Pomo. Soc., Livermore Falls.*

MARYLAND, May 21—With no regret we passed mid-May and breathed more easily that frost danger was past. In late May the peach crop prospects seemed considerably better than last year. Blossom blight infection of brown rot was widespread but quieted down; however, the peach growers are watching for its return when weather is right, along about harvest-time. The apple prospects seemed almost too good, considering those 21-degree nights, but about mid-May a heavy dropping of the small apples began and, by June, there was a prospect of less than a half crop.

Artificial pollination has been done in some states, but Maryland growers are still putting their faith in the trusty little bee. This season the cold weather kept the bees close to home, but there were some good pollinating days and, also, there were quite a few bumble bees and smaller wasps that did not worry about cold or wind.—*A. F. Vierheller, Sec'y, Md. State Hort. Soc., College Park.*

MASSACHUSETTS, May 18—With practically all Massachusetts orchards showing a snowball bloom, prospects for a banner crop appeared bright at the beginning of the blossom season. But after two or three days of favorable pollinating weather, cold, rainy, weather, which restricted bee flight, persisted for five days, and a rather poor set may result. Favorable weather for pollination during the latter part of the blossoming season could increase the set, however.

One grower is trying out several pollen dispensers to provide pollination for a large McIntosh block. Poor weather for bee flight may prevent any evaluation of the method this season.—*W. D. Weeks, U. of Mass., Amherst.*

MINNESOTA, May 19—It will be several weeks before an accurate crop prospect for apples can be given. We know that winter injury has been severe in almost all sections except along the Mississippi valley—in large areas of the state there will be little or no apple production.

There is severe injury to uncovered raspberries in many sections. Many plantings are killed to the ground, except those in well-protected locations. Strawberries and raspberries in the Mississippi river area appear to be in good condition while injury in other sections has not yet been determined. Grapes are badly damaged in many parts.

Plums, cherry-plums, currants, and gooseberries are reported in good condition in most sections with excellent bloom.—*J. D. Winter, Sec'y, Minn. Fruit Growers Assoc., Mound.*

NEW HAMPSHIRE, May 22—It is too early at this date to know what the set of apples will be. The bloom is heavy in most orchards, especially on McIntosh. Most orchards are well-supplied with bees for pollination purposes, and all we need is a day or two of sunshiny warm weather in the next week to insure a set in most areas.

One of the most interesting extension meetings this spring was held at Londonderry. We took along our laboratory equipment and set up shop in the town hall. Growers had an opportunity to examine under dissecting binoculars scab, scales, red mite, and various insect eggs. All the growers said they learned a lot and had a better

idea of how these pests live and multiply.—*E. J. Rasmussen, U. of N. Hamp., Durham.*

NEW JERSEY—Fruit growers have experienced a difficult spring season following a hectic winter of unusual weather and poor markets. The effects of the extended cold periods and ice storms of last winter are becoming apparent throughout the State. Growers report considerable girdling of young trees by mice and rabbits.

The marketing season is drawing to a close after a rather unsatisfactory year. High handling costs, the doubtful quality of many lots when taken out of storage, and the keen competition of Washington apples were the principal difficulties.

Small fruits, especially raspberries, suffered considerable winter injury in South Jersey.

NEW YORK, May 22—The weather in western New York has been miserable and cold for the entire blossom period, with Hudson Valley conditions slightly better but not entirely satisfactory.

A good blossom has taken place on McIntosh, Wealthy, and Cortland; it has been fairly good on Delicious, spotty on Greengings, and light on Baldwins.

The ground has been very wet and difficult to get spray rigs through, but the growers have been spraying and doing everything they can to control disease.—*D. M. Dalrymple, Sec'y, N.Y. State Hort. Soc., Lockport.*

OHIO, May 15—The statewide prospect for apples is better than 1947. Peaches will be lighter than a year ago. Locally, there are areas where the peach crop was killed during the March 12 freeze. The apple bloom was rather spotty in some orchards, especially where scab was serious in 1947.

Another modifying factor in the fruit set this year has been the shortage of bees, especially where growers have depended on wild bees. Orchardists are apparently doing a good job of spraying. It seems safe to predict that quality will be better this year.—*C. W. Ellenwood, Sec'y, Ohio State Hort. Soc., Wooster.*

SOUTH CAROLINA, May 19—Peach crop prospects in South Carolina indicate that, under normal growing conditions, there will be 3¼ million bushels. This is just about half of the expected crop prior to March 29. Growing conditions have been very favorable thus far with the exception of a slight deficit in rainfall. Fruit development has been unusually rapid thus far which indicates that under normal conditions fruit size will be the largest in several years.

Curculio infestation this year has been very light; benzene hexachloride has been used extensively with excellent results. Much more chlordane has been used than was expected and produced excellent kill of adult curculio. One of the heaviest infestations of Oriental fruit moth on record is expected but growers are all ready with DDT.—*Roy J. Ferree, Ext. Hort., Clemson Agr. Coll., Clemson.*

(Continued on page 21)

A QUICK FREEZE PLANT WITH A NEW METHOD



WINTER GARDEN, one of the largest and most modern quick freezing plants in Tennessee, can process as many as 800,000 pounds of fruit a day in its big plant at Bells, Tenn. The large factory is equipped to process berries, peaches, apples, beans and other vegetables.

A new method of quick freezing is used in this plant which employs a large four-compartment vat filled with a brine which is kept at 10° below zero. The produce to be frozen is prepared in tin cans the same way as for cooking, and cans are immersed in sub-zero brine for quick freezing.

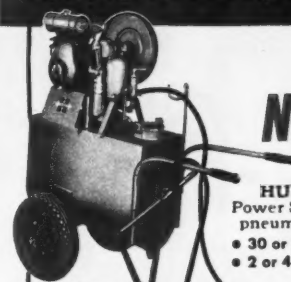
How to Spray the Modern Way

*The fruit growers in our neighborhood each winter hold a school,
Where the codling moth professors and the fungus doctors rule.
Now we follow their suggestions, as we hope for bumper crops,
Until some new bug comes along and turns 'em into drops.
They've got a program all worked out to tell you when to spray,
The dope to use, and just how much, to scare the bugs away.
The hist'ry of each little bug they they know from A to Z.
They can't pronounce what kills 'em, so they call it DDT.
Sometimes the new concoctions, from the chemist's crystal ball,
Are fatal to the bug involved, the tree, the grower, and all.
But this is much too thorough, so our experts test the claims
Of the manufact'ring fellows without calling any names.
At last they've OK'd P.D.Q., tank-mixed with Spic and Span;
It's safe to spray on apple trees and on the hired man!
I buy myself a half a ton, and figure all is well;
Tomorrow will be just the day to make those red mites yell.
I have my rig in tip-top shape, thanks to the experts' warning;
I go to bed with spirits high to dream of bugs 'til morning.
Now just as sure as I get up, the wind will start in blowing;
By noon it's raining cats and dogs; by night it may be snowing.
Oh woe is me! I'm stuck in mud; the wind is getting stronger.
According to the expert, though, I dare not tarry longer.
That devil hollers, "Hurry up! You've got just thirteen hours
Before the fungus vegetates, and ruins all the flowers!"
The spray rig's in up to the hubs! We've cramped all ways, and backed her!
I've stuck a pole up in the mud, where last we saw the tractor!
You warned me, Friend, of overlap, of oil build-up, specific;
I overlap at least ten rows! Gee! Ain't this wind terrific?
If I could catch that expert when the wind is blowing free,
I'll bet you fifty dollars, he can't even hit the tree!
I spray by day, I spray at night, and in between I dust 'em;
And, if the experts paid the bill, I'm darn sure it would bust 'em!
Efficiency's the keynote; I can't even take my nap;
I don't have time to kiss my wife, or hold her on my lap!
I've had to give up smoking, 'cause I don't have time to light 'em!
Two tanks an hour! No matter what! And so ad infinitum!
We fruit growers have it easy, huh? We work just when we please?
All summer long we sit and watch the apples on our trees!
Of course I'm only kidding, for we fruit growers realize
If the experts made the weather, we could live on apple pies!*

Albert L. Mason

NEW HUDSON Power Sprayers

Advanced Design, New Features
for Easier, Faster, Better
Spraying. Now Ready for You



New

HUDSON
Power Sprayer on
pneumatic tires
• 30 or 50 gal. tank
• 2 or 4 gal. per min.



New

HUDSON
Power Sprayer
on skids for use
on trucks,
trailers
• 30, 50 or
100 gal. tank
• 2 or 4 gal.
per min.



New

HUDSON
"Trail-A-Spray"
• 150 gal. tank
• 2 or 4 gal. per min.

• Save time—save back-breaking work—with a power sprayer. Just be sure it's a new HUDSON—the most advanced power sprayer ever made. More efficient pumps, new agitators, new nozzles apply spray materials the right way for best results at lowest cost. Rugged all-welded chassis, stainless steel valve assembly, slow-speed long-life pumps assure trouble-free operation.

Hudson power sprayers apply any liquid that can be sprayed: 2, 4-D weed killer, insecticides, fungicides, disinfectants, white-wash, etc. . . . in fields, orchards, barns and buildings, everywhere.

See Your HUDSON Dealer, or
WRITE TODAY FOR FULL DETAILS

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Chicago 11, Illinois



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Sprayers and Dusters
Poultry Equipment
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“Black Leaf 155”...

BLACK LEAF 155 controls codling moth, leafhoppers, leaf-miners, aphids and grape berry moth, without destroying beneficial insects such as those that hold mites in check.

BLACK LEAF 155 is a non-caustic, non-volatile nicotine spray. It sticks through heavy rains, giving maximum protection. It is economical. Its use protects the vigor of the leaves and promotes quality fruit.

Black Leaf 40

Years of successful use have proven Black Leaf 40 an effective contact spray, highly compatible with other standard spray materials. It kills by contact and by fumes.

**TOBACCO BY-PRODUCTS &
CHEMICAL CORPORATION**

LOUISVILLE 2,

KENTUCKY

RESEARCH AND MARKETING ACT

(Continued from page 9)

ly. In too many instances the cost of handling in such wholesale markets constitutes an excessive part of the retail price. A study has been completed and rather comprehensive reports published concerning the need for and possibilities of improved wholesale markets in Hartford and New Haven, Conn., Baton Rouge, La., Richmond, Va., Atlanta, Ga., Columbus, Ohio, and Miami, Fla. Similar studies are well along in about 20 other cities.

The purpose of still another study relating to costs is to examine the possible merits of a retail market news service. If it is practical to operate such a service, it would help not only the retailer in setting his

Deciduous and citrus advisory committees are provided for by the Research and Marketing act of 1946. The membership of these committees is as follows:

CITRUS. Chairman, F. R. Wilcox, Cal. Fruit Growers Exch.; A. Vernon Sauerman, grower, Clearwater, Fla.; J. Wayne Reitz, United Growers & Shippers Assoc.; Raymond D. Robinson, Dr. P. Phillips Canning Co.; Robbins Russel, Mutual Orange Distributors; W. H. McCracken, Treesweet Products Co.; G. O. McDaniel, grower-processor, Edcouch, Tex.; Alden M. Drury, Texsun Citrus Exch.; W. F. McCordle, Wesco Foods Co.; L. V. Eberhard, distributor, Grand Rapids, Mich.; and Charles A. Rogers, Zulfer and Rogers.

DECIDUOUS. Chairman, Carl G. Wooster, N.Y. State Hort. Soc.; Samuel Cooke, Penn Fruit Co.; Troy H. Cribb, S.C. Peach Growers Assoc.; Harry C. Dunlap, Dried Fruit Assoc. of Calif.; J. Henry Estes, wine grapes grower, Fresno, Calif.; Elon J. Gilbert, Richey & Gilbert Co.; J. E. Klahre, Apple Growers Assoc.; M. E. Knouse, National Fruit Prod. Co.; L. E. Neel, Turlock Co-operative Growers; Walter A. Reich, A. Reich & Sons, Inc.; and A. J. Rogers, Cherry Growers, Inc.

TREE NUT. Chairman, D. R. Bailey, California Almond Growers Exchange; W. C. Tesche, California Walnut Growers Assoc.; Carl J. Braun, Braun Importing Co., Inc.; John E. Trunk, Nut Growers, Inc.; Dwight K. Grady, Rosenberg Bros. & Co.; J. T. Haley, First State Bank of Albany; Henry W. Fisher, Washington, D.C.; C. E. Johnson, The Kelling Nut Co.; R. J. Moore, R. E. Funsten Co.; Ed F. Phelps, Jr., National American Wholesale Grocers' Assoc.; and George G. Cadwell, Northwest Nut Growers.

prices, but also the thrifty housewife. It would help the producer by keeping him informed as to what the ultimate consumer is paying. It should also have the advantageous effect of keeping retail prices more in line with those of the wholesaler. It is generally believed that if retail prices dropped promptly with wholesale prices when market gluts appear, a larger percentage of the surplus could be sold and used instead of dumping it in retail store garbage cans. Surveys show that about one-fourth of the deciduous fruits grown never reach the consumer and that about 7 percent loss from spoilage occurs at the retail store.

Who has not noticed the wide

extremes in the attractiveness of fresh produce displays in retail stores? Some are irresistibly attractive; others repulsive. Obviously, a lot more is known about merchandising than is being widely used. As a basis for encouraging more universal adoption of efficient merchandising methods, a series of training courses is being conducted in certain cities throughout the country. The display and care of fresh produce to minimize waste, buying methods, record keeping, pricing, and other pertinent phases of fresh produce marketing will be covered.

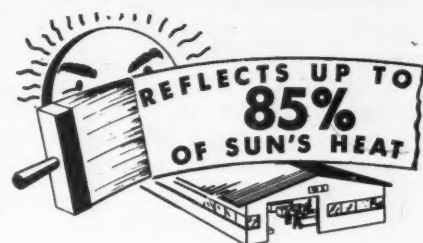
There are, of course, many biological, as well as economic, aspects to marketing. Research as to the cause and cure of decay in fresh fruit and vegetables after they have been harvested is still in its infancy. The commodity advisory committees have strongly urged that studies be aimed at finding ways and means of offering the customer a product of higher quality. Accordingly, studies are being made to see what can be done to lessen the terrific toll from brown rot of peaches, blue mold rot and gray mold rot of apples and pears, stem-end rot of citrus fruit, and bacterial soft rot of vegetables. In addition to testing out the merits of various fumigants and disinfectants, scientists will attempt to learn what influences different types of containers, ventilation, and refrigeration have on the spoilage of fresh produce.

Avid interest has been shown in consumer-unit packaging. Producers and other segments of the fruit industry want to know whether pre-packaging is economically feasible. What is the best type of wrapping material for different items? Where should the packaging be done? Is pre-packaging here to stay? The answers to these questions are being sought in a Research and Marketing Act project. There are many seemingly valid reasons why consumer-unit packaging, especially of fruits, should be expanded. It will permit retail stores to put their produce departments more fully on a self-service basis; it will take brand names into the homes of consumers; it lends itself to attractive display. For obvious reasons, pre-packaged produce is damaged less by pawing and pinching than is produce offered in bulk. Pre-packaging will cost a little more, of course, but it is very probable that the savings that will accrue by having less produce go out the back door as garbage will offset the extra costs.

In an effort to expand markets abroad for certain crops grown in

(Continued on page 20)

INSULATE AND BEAUTIFY FRUIT SHEDS and COLD STORAGE BUILDINGS with ALUMI-SHIELD



REDUCES REFRIGERATION COSTS!

Offers the heat-reflectivity of a soft, silvery, "easy-on-the-eyes" aluminum finish... plus the added durability of quality asphalt and long asbestos fibres!

EXTRA WINTER PROTECTION TOO!

Alumi-Shield contracts and expands through temperature extremes the same as the surface it protects. The aluminum finish affords extra resistance against wet, wind, cold.

EASY TO APPLY!

Comes ready-mixed in correct proportions. One coat does the job. Use on roofs and sidewalls of composition, brick, concrete — goes right over metal flashing and gutters, too!



Write for new, fact-filled folder "Alumi-Shield on the Farm," nearest office below.

THE PARAFFINE COMPANIES, INC.
New York 16 San Francisco 19 Chicago 54



An Open Letter to the Nation's Farmers

Subject: RAILROAD RATES

Rates and fares are the prices at which railroads sell their services. These prices are higher now, in dollars and cents, than they were before the war but as compared with most other prices, they are distinctly lower.

The increase since 1939 in the prices at which railroads sell their freight services has been only about half as much as the percentage by which railroad wage rates and the prices of railroad materials, supplies and fuel have gone up. In passenger service, the increase in selling prices has been only one-fourth as much as the average increase in the prices and wages which railroads must pay.

Increases in railroad rates are effects, not causes. Rail rates were no higher at the end of the war, and in many instances were lower, than when war began. Subsequent increases came after and not before the increases in the prices of other things. Indeed, there are few commodities or services for which the increase in price since 1939 has been so little, or so late.

Experience has shown that poor and inadequate transportation is costly, no matter how low the rate might be, while good and adequate transportation is worth what it costs. The foundation of good transportation is good plant and equipment. That requires investment, and investment depends upon earnings or the prospect of earnings.

The best way, and indeed the only sure way, to have better transportation in the future is to give railroads a chance now to make earnings in line with today's costs — such earnings as will justify and encourage continued investment in the better railroad plant and facilities which are the one sound foundation of better service at the most economical cost.

Sincerely,

William T. Jarvis
President

Association of American Railroads

WASHINGTON 6, D. C.

IN THE NEWS

Dr. J. H. Schultz

North Dakota Agricultural College has had a new chairman for its department of horticulture since April 1. He is Dr. J. H. Schultz who comes from the Washington State Agricultural Station where he was a member of the staff of the Prosser Irrigation Station. Dr. Schultz was co-author of the recent article in *AMERICAN FRUIT GROWER* entitled "Irrigation Projects Create New Fruit Land in Washington."

Dr. Schultz will also be professor of horticulture in the School of Agriculture and principal horticulturist in the Agricultural Experiment Station.

Arthur T. Williams

Arthur T. Williams, who solved many of the growers' spray problems in Connecticut, has resigned his post as Extension Spray Specialist. He has become a representative of the Eastern States Farmers Exchange.

Mr. Williams came to the Connecticut Station in 1945 and during the last three years has been a regular contributor to "Pomological Pointers" issued by the Connecticut Pomological Society, and "Storrs Horticultural Notes" compiled by A. C. Bobb. During the 1947 spray season, Mr. Williams made tri-weekly broadcasts of last-minute spray developments and recommendations.

Dr. L. Frederick Hough

Carrying on the peach breeding work of the late Prof. M. A. Blake will be Dr. L. Frederick Hough who has recently become a member of the pomology staff of the Horticultural Department, College of Agriculture, Rutgers University. He will also be advisor on apples and small fruit and will do some work with pear breeding.

Dr. Hough attended Michigan State College and took his graduate work at Cornell University and the University of Illinois. Before coming to Rutgers University, he was associate chief in horticulture at the University of Illinois.

RESEARCH AND MARKETING ACT

(Continued from page 19)

this country, including fruit, commodity specialists have been assigned under the auspices of the Research and Marketing Act to stimulate foreign demand. Under this project Fred A. Motz has visited the principal pre-war European markets for United States fruit and is now in this country conferring with representatives of the fruit industry. An account of his findings in Europe is given in the April issue of the *AMERICAN FRUIT GROWER*.

The work discussed here represents only the more typical types of research being done on marketing and distribution of fresh produce, but it should give fruit growers and merchandisers a fairly good idea of what this new legislation means to them.

AMERICAN FRUIT GROWER

STATE NEWS

(Continued from page 16)

VERMONT, May 20—The orchards in southern Vermont are approaching the full-bloom stage. For the most part, a good blossom condition is expected throughout the state.

The number one concern of fruit growers, since the trees were in the delayed dormant state, has been control of apple scab. In some orchards special sprays have been applied in an effort to provide maximum protection against it.

Delicious and other varieties intended to provide pollen for McIntosh will bloom much later than McIntosh. This condition is unusual and will be overcome by the use of bouquets or by artificial application of pollen.

A number of Vermont apple growers are using pollen purchased from the Pacific Northwest and intend to make the application by spraying. Most applications will be made with "speed" type sprayers.

Two demonstrations were conducted in April showing use of helicopters in applying sulfur dust. Field examination of the dust coverage provided was made by the growers. In their opinion, a completely satisfactory coverage was obtained.—*C. L. Calahan, Ext. Hort., Burlington.*

WASHINGTON, May 21—We have had some bad frosts, and pollinating weather has been poor. Apples in some of the late areas are just coming into full bloom.

Frost damage was not serious in the Wenatchee area although there was some damage to apricots in low areas. A little frost damage has resulted in Okanogan, but apparently it is not serious.

There has been serious damage in Yakima to cherries, apricots, and peaches, and quite a bit to Bartletts. Some suspect that the crop for these fruits may be cut to about half of normal. Apples, in general, there, may be 85 to 90 percent of last year.—*John C. Snyder, Ext. Hort., Pullman.*

WEST VIRGINIA—A new and rather unique use has been found for apple cider. In a christening ceremony at Paw Paw, West Virginia, an historic point on the Baltimore and Ohio Railroad's main line, Miss Lucilare Miller, 17-year-old daughter of Henry W. Miller, Jr., vice president of the Consolidated Orchard Co. at Paw Paw, christened the new B & O Pullman car with a bottle of—you guessed it—apple cider! The car was called "Paw Paw" in honor of the town, at the suggestion of Fred W. Read, assistant general manager of the California Fruit Exchange.

WISCONSIN, May 20—There was considerable winter injury to Delicious and Jonathans, but in some orchards there was a small amount of bloom on these varieties. McIntosh and other hardy varieties came through in good shape, but in some orchards where Wealthys bore heavily last year, not only the fruit buds were killed but considerable injury was also done to the branches.

It is yet too early to give any accurate indication of crop prospects. Following last year's serious scab, growers are making every effort to control it this year, and we anticipate better results from that angle; we may have a near normal crop.—*H. J. Rahmlow, Sec'y, Wis. State Hort. Soc., Madison.*

A little VAPOTONE XX Insect Spray goes a long way—quickly—when such hard-to-kill insects as *Red Spider, Mites, Thrips, Leafhopper and Aphids invade your orchards or field.

THEY* CAN'T TAKE IT

This ORTHO organic insecticide has shown highly satisfactory results in stemming the summer ravages of the insects indicated.

VAPOTONE XX kills by contact. Low dosage is required. Thorough application in a fine spray from power equipment gives the best results.

VAPOTONE

TRADE MARK REG. U.S. PAT. OFF.

XX INSECT SPRAY

For specific information concerning the use of this new ORTHO organic spray in your orchard or field, consult your ORTHO Fieldman.



CALIFORNIA SPRAY-CHEMICAL CORPORATION

RICHMOND, CALIFORNIA ELIZABETH, NEW JERSEY
 PORTLAND, OREGON KANSAS CITY, MISSOURI DALLAS, TEXAS ORLANDO, FLORIDA LYNDONVILLE, NEW YORK
 SOUTH HAVEN, MICHIGAN BOISE, IDAHO

NOT OVERPRODUCTION

(Continued from page 13)

It has been said that no fruit is adapted for use in so many ways as is the apple. If apples of only U.S. No. 1 grade or better were sold as fresh fruit, and all the other millions of bushels were manufactured into various by-products, it would be to the advantage of both the producer and the consumer. More research is needed as to the various products that can be made from these lower-grade apples. Of course money will have to be spent to advertise these products in order to get them to the consumer.

Much of the apple sauce and apple juice now being sold could be improved in quality. The business of selling fresh and frozen apple slices has made a start. Perhaps a greatly increased use of concentrated apple juice and apple syrup will soon be found.

Could maple syrup and apple syrup be blended into a product of much greater use than either of them now has when sold separately? Could pure apple juice be used as a base for many of the more highly-flavored juices in much the same way as the housewife dilutes blackberry jam or cranberry sauce with apples to make

them go further? With research and trial, many other uses for the lower-grade apples can be found. When such grades are removed from the fresh fruit market, and the growers advertise their product in a national way, I believe most of the present day so-called marketing problems of the apple grower will disappear.

It will, however, still be necessary for the grower to produce a high percentage of quality apples and to see that they are handled so as to reach consumer in best possible condition.

WE MUST IMPROVE THE PRODUCT!

(Continued from page 13)

It takes extra effort, extra expense, and closer supervision to get quality products, but the extra quality usually pays.

A producer of quality products often does not get his full reward unless he also develops special outlets. Some erect roadside stands, well-located; others find certain buyers who will pay a premium for their high-quality product. A well-managed co-op often can do a good job on higher-quality products if they are segregated.

Some up-and-coming growers develop their own outlets in chosen markets. I sincerely recommend the service of a broker—someone who represents the shipper, usually on the terminal and distributing market. A broker maintains only an office and rarely handles the fruit. A good broker performs many services. He transfers offers by jobbers and other buyers to the shipper for acceptance, rejection, or counter offer. If consignment is made, he sees that the product is consigned to the best houses, sees that it is pushed, arranges collections, and often collects, himself. In other words, he is his client's representative and is looking after his client's interests. A good broker will earn his small fee of \$25 to \$50 per car or 5 cents to 10 cents per package many times over.

How does one find good, dependable brokers? I found mine by subscribing for the sum of \$85 for one year, to a reliable Produce Credit Book. A credit and business rating of every market operator is given there. Select one with a good rating who handles a good volume, and talk it over with him, if only by letter. He can tell you what he can do and what he cannot do for you. Do not pick one who promises too much. He can get for you only what your fruit is worth.

Another medium which helps the grower to get as much as his product is worth, is well-placed advertising.

AMERICAN FRUIT GROWER

BE SURE!

buy STAUFFER insecticides and fungicides

This year rely on one source of uniform supply for your insecticide needs. With so many new products being developed it's to your advantage to rely on the products of a company that

has been in the agricultural field since 1885.

See your local Stauffer dealer or write to our nearest office for complete information on the products in which you are interested.

D.D.T.—DUSTS AND SPRAYS

Stauffer manufactures a wide range of dusting and wettable D.D.T. products including concentrates, or in combination with sulphur, benzene hexachloride, copper and other insecticides or fungicides.

MAGNETIC "70" CONCENTRATED SULPHUR PASTE

A free-flowing product containing 70% Sulphur. No pre-mixing required—Quick setting and extremely adhesive. Particle Size—4 to 5 microns.

MAGNETIC "95" DRY WETTABLE SULPHUR

For growers preferring a dry, wettable sulphur. Readily wettable—disperses well without excess foaming. Particle Size—4 to 5 microns.

MAGNETIC "90" DUSTING SULPHUR

Particle Size—4 to 5 microns, insuring good coverage.

MAGNETIC "HUMIDIST"

A dusting Sulphur containing 92% Sulphur. May be applied during and after rain as a "sticker" insures adherence to foliage. For growers who find it necessary to dust in an emergency.

Also headquarters for concentrates and mixtures of DDT (Dichloro-Diphenyl-Trichloroethane)—BHC (Benzene Hexachloride)—Chlorinated Camphene.

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636 California St., San Francisco 8, Cal. Apopka, Florida

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IMPROVE PRODUCT!

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Such advertising starts buying. The better the quality of the fruit sold, the more lasting the benefits of advertising. Good fruit, once people know about it, will sell itself. It does not usually pay to advertise poor fruit.

Let me emphasize: well-grown fruit is half sold—but only half! Growers must be on their toes to take advantage of superior fruit in order to receive as much as the better fruit is worth.

SOME POINT BY POINT SUGGESTIONS

(Continued from page 12)

age that nets highest returns in a particular market, and other intricate details.

To summarize: in my opinion, the number one marketing problem is maintenance of quality and appearance of both fresh and processed fruit; next, knowing market contacts better and confiding in them; then in order, encouragement of larger exports by investigation of new markets, and a more unified promotional program for apples throughout the United States, with less overlapping of effort by competing organizations. Also, there are many marketing forums scheduled each year which are very poorly attended by the growers who should be interested. These should not be overlooked; they are important.

LET'S PULL TOGETHER

(Continued from page 13)

The field of research in the services of marketing horticultural products seems to me to be wide open and full of opportunities for progress. Many advances have been made, but we fruit growers have too long been content to let those who dispose of our products assume the responsibility for improvements in packaging, refrigeration, storage, methods of handling and transportation, display, and selling. Usually the firms who handle fruit at wholesale or retail levels also handle many other items, some of which are more profitable to them than fruit. Since this is true, these firms should not be expected to lead the way in improved marketing techniques for our particular products.

In a nation such as ours, which has produced mechanical and electrical marvels almost beyond comprehension, whose genius has split the atom, and whose mental calculations have bridged interstellar space, there must be people who, under proper impetus, could design better machines for our packing houses and better methods for the presentation of our perishable fruits to the consuming public than those which we now employ.

(Continued on page 24)

JUNE, 1948



You know what you're doing
when you spray the old, reliable

REG. U. S. PAT. OFF.

FRUITONE

FOR PRE-HARVEST DROP

Fruitone was the first hormone spray to be put on the market. It has 8 years of successful use behind it. It is an accepted, dependable product that gives the results you're looking for.

LIQUID OR POWDER

Fruitone can be obtained in liquid or powder form . . . whichever you and your State Experiment Station prefer.

ORDER NOW. The average tree must be sprayed at least ten days before picking time. Order your supply now from your dealer, or write to us direct.

American Chemical Paint Company
Ambler, Pa.

Send for your Maturity Schedule, telling you the best time to spray for every variety of apple and pear.



THE POWER THAT BEATS MANPOWER

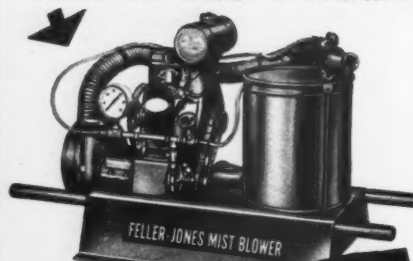
For handling crates and baskets, for loading or unloading cars and trucks, the NEW STEVEDORE, JR.* is way ahead of manpower. It's quicker . . . it's easier . . . it's lower cost.

Rolls easily from job to job. Motor driven endless belt raises your crates and baskets as high as 82". Screw and bevel gear supports make adjustment easy . . . safe. Variety of lengths and widths available. Get the details today.

THE RAPIDS-STANDARD CO., INC.
364 Rapistan Bldg., Grand Rapids 2, Mich.
Representatives in principal cities *T.M.Reg.

RAPIDS-STANDARD
MATERIAL HANDLING EQUIPMENT

GREAT for small orchards!



THIS NEW ONE-MAN SPRAYER
covers every inch in every acre!

SAVES YOUR FRUIT FOR MARKET!

• Here's the quick, easy way to protect all your fruit! Mist Blower's powerful air-borne spray covers every leaf and every piece of fruit—doesn't miss a spot, because it drifts with the air! Goes over 30 feet high, carries more than 500 feet, drifts quickly into hard-to-reach foliage. Runs on economical 1/4 H.P. gasoline motor that saves you plenty . . . in time, money, and labor! IMMEDIATE DELIVERY.

Compare these features:

- Low-cost, one-man operation.
- Weighs less than 100 lbs.
- Air spray . . . needs no heavy water hoses.
- Won't stain nearby cars or houses.
- Mixes perfectly with any insecticide, fungicide, or hormone.

EXTRA AT NO EXTRA COST! Agitator for use with wettable powders and emulsions.

WRITE TODAY FOR LOW-COST DETAILS
DEPT. AFG
FELLER-JONES MIST BLOWER INC.
303 FOURTH AVENUE • NEW YORK 10, N.Y.

LET'S PULL TOGETHER

(Continued from page 23)

Were all fruit growers members of one large company, I am convinced that their firm would long ago have solved many of the problems of time, distance, and temperature which still continue to cut down their profits by depriving our customers of the quality they have the right to expect. I would like to see the fruit growers of the United States pull together to secure the helpful results that careful research into our several marketing "unknowns" could give us.

YOU CAN'T JUMP TO AN ANSWER

(Continued from page 13)

In discussing marketing, every factor in the industry usually comes in for a share of the criticism—the broker is taking too large a "cut," the trucker's charge, or the freight, is excessive, the wholesaler is "hiking" the price to the retailer too steeply, and, of course, the retailer's profit is beyond all reason. It has been suggested that even growers are guilty of not producing and packing the sort of merchandise that will appeal most to consumers. Undoubtedly, there is room for improvement all along the line. It is all too often forgotten that there must be at least two parties to every trade, or business transaction, and to be on a continuing basis, this trading must be mutually beneficial. If one side is getting all of the profit, the other is forced ultimately to quit and some one is "out of business."

If the fruit trade (the industry as a whole) is to flourish and meet all competition, the question can not be always, "How can I get more for my stuff?" but "How can I produce better goods, or services, and still retain my share of the profit?"

So the answer to the question probably is that the most important marketing problem for the industry is to get every one concerned to see the need of constant improvement in the entire marketing process. Every problem is important and the improvements should be adopted before they are forced upon us by more alert competitors.



"MICROGEL"



My Partners!

These superior fungicides can be used as a spray or dust. Both go into suspension in water quickly, and do not clog or injure spray equipment, highly recommended for control of melanose and scab.

Especially effective—do not injure fruit or vegetables.

DEMAND

That Tennessee Tri-Basic Copper Sulphate be used when buying Copper Sulphate Mixtures.

TENNESSEE

Atlanta, Georgia



TENNESSEE CORPORATION

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Lockland, Ohio

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MARKETING BEGINS IN THE FIELD

(Continued from page 10)

varieties: Jonathan, McIntosh, and Northern Spy. However, there are still too many old varieties cluttering the scene. Reduction of their number would mean further progress.

There are, of course, times when a wide assortment of varieties is desirable, as in local and roadside trade. Operation and sales can be spread over a long period by growing a succession of quality fruits. Such a plan is helpful to the marketing of fruit in general, especially if the product is of high quality, ripe, and attractive. The best advertisement for apples is a good apple. Inferior produce should be eliminated from the tourist and roadside trade, and in its place should go the best.

An integral part of the variety situation and its effect on market supplies is the tendency of some varieties toward biennial bearing. The trend toward the planting of annual producing varieties such as Jonathan, Delicious, and McIntosh in place of York, Sutton's Beauty, Tompkins King, Baldwin, and other biennial-bearing varieties is sound; yet how to get annual production from biennial-bearing varieties already planted is still a major problem. We know that blossom thinning will help if done in the "on year." We withhold or reduce spring nitrogen applications in the "on years" and we prune more heavily in the "on year." But the final answer still lies with the plant breeder in the origination of varieties that tend to bear annually.

Then there is the matter of planting the variety where it grows at its best. Grimes Golden and Stayman in the North are pitiful products. McIntosh is nearly worthless in the South. Elberta peaches on heavy soils in a region of cool seasons are a depressing influence. The Concord grape develops poor quality in a short, cool season. Varieties of peaches ripening earlier than Elberta, such as Redhaven, Golden Jubilee, and Halehaven are preferred for regions where Elberta does poorly because of short seasons.

The selection of variety is conditioned by market outlet as well as by suitability to the region. Small Jonathans are not a happy answer to a neighboring canner who needs large size if he is to stay in business. White-centered strawberries meet hard competition from solid red varieties when the outlet is the freezer. Small Kieffer pears are not wanted at the cannery any more than are poorly-colored McIntosh on the fresh fruit market.

(Continued on page 26)



NEW ORGANICS plus LONG EXPERIENCE for COMPLETE PEST CONTROL

MUCH of the confidence in a physician comes from his long years of experience in a wide and diversified practice. New treatments are guided by a thorough background of knowledge.

So it is with the new Niagara Organic Insecticides for complete control of apple and peach pests. Better formulations and experience in proper blending assure you of maximum performance.

Here are four prescriptions for healthy fruit, larger packs and greater profits:

1. Rx NIAGARA NIATOX (DDT) CROP SPRAYS and DUSTS: for Apples and Peaches.

2. Rx NIAGARA BHC (benzene hexachloride) CROP SPRAYS and DUSTS: for Peaches.

3. Rx NIAGARA CHLORKIL (Chlordane) SPRAY and DUST FORMULATIONS: for use on Peaches and for Grasshopper control in orchards.

4. Rx NIAGARA HEXCIDE 200 (tetra ethyl pyrophosphate): for Aphis, Mites, Red Spiders and Curculio control.

FOR FAST—TIMELY—THOROUGH COVERAGE

There's nothing better than the

New Niagara CYCLONE LIQUI-DUSTER (it sticks the dust on)
and the

Niagara CYCLONE ORCHARD DUSTER



NIAGARA CHEMICAL DIVISION

FOOD MACHINERY CORPORATION

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Dependable **CHAMPION**

America's Favorite Spark Plug



Your choice of CHAMPION SPARK PLUGS for your car, truck, tractor or other power farming equipment is made easy and sure by the fact that CHAMPION has consistently been America's favorite spark plug, and is backed by performance records unequalled by any other.

Champion Spark Plug Company, Toledo 1, Ohio.

FOLLOW THE EXPERTS

DEMAND NEW DEPENDABLE CHAMPIONS FOR EVERY FARM ENGINE

Listen to the CHAMPION ROLL CALL . . . Harry Wismer's fast sportscast every Friday night, over the ABC network

MARKETING BEGINS IN THE FIELD

(Continued from page 25)

Too much emphasis on Bartlett and Elberta—even though they are good varieties—presents a problem of market glut. The trend toward winter pears on the West Coast and toward earlier ripening varieties of peaches like Redhaven and Halehaven are proper steps.

Quality, though it is an elusive term, is all-important. Low-quality plums like the Arch Duke, Grand Duke, Yellow Egg, and Lombard do not help the plum market, and the Latham red raspberry is not the best. The days of the Ben Davis apple are almost forgotten. The world is always seeking a product of higher quality.

Size of fruit is another factor in marketing that is influenced by production. Large size is not always preferred, but uniformity of size is always important. The processor will more and more insist on a uniform product of good size, grown especially for him. The Rome apple must be grown for size if the fruit is to move through the baked apple channel. On the other hand, too large a McIntosh is not desired by the fresh fruit trade, so emphasis must be placed on getting good sets of uniformly spaced fruit. The Rochester peach is likely to overload and the fruit be small. J. H. Hale is wanted large. In the Pacific Northwest the demand, until a few years ago, was for medium-sized Comice pears, so cultural practices were shaped in that direction. More recently, with the entry of the gift packing of this variety as Royal Riviera, the demand has been for large size, with an attendant shift in cultural practices to meet the situation.

Color markedly affects movement in the trade, and color is largely a production problem. Liver-colored Baldwins are a product of heavy soil. Poorly-colored McIntosh are the result of too much nitrogen, too-heavy mulches, too-vegetative a condition of the tree, and a location which provides too-warm a growing season. In general, the trade prefers bright, snappy color to just color. The varnished look of the Premier strawberry is an asset. The Macoun apple may develop too dark and forbidding a color to be attractive in some sections. The heavy pubescence of the Rochester peach hurts its appearance and, therefore, its marketability.

Blemishes are serious faults, of course. Although formerly largely caused by insects and disease, they are now more likely to be caused by bruising. Splitting of "doubles," removing of blemished and odd-

AMERICAN FRUIT GROWER

BEGINS
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(page 25)

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ROWER

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**Alcoa Cryolite
is a SELECTIVE
Insecticide**

Kills harmful, chewing
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Helps save beneficial
insects that destroy
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1737 Gulf Building Pittsburgh 19, Pa.



Packed in 50-lb. bags, 6-lb. bags
and handy 1-lb. shaker cans.

Alcoa Cryolite Insecticide

JUNE, 1948

shaped fruits in thinning, and pruning
to keep the trees low and open all help
in the problem of marketing.

Harvesting is an operation in itself
which can spell success or failure in
marketing. Too much fruit is har-
vested prematurely. Delicious apples
are often harvested so early that they
store poorly and are of low quality.
If harvested too early, some varieties
of apples may scald; if harvested too
late, they break down in storage.
Green peaches never ripen properly.
Pears picked too late become soft at
the core and break down. Too-heavy
application of nitrogen results in pre-
mature dropping of McIntosh, and
this situation is frequently met by
picking too early.

Handling, which is really a part of
harvesting, is becoming the limiting
factor in getting fruit to the consum-
er in good condition. Records on
peaches and apples show up to 60 per-
cent bruising on occasion. There is
little more that need be said at this
point because the answer is so obvious
—namely, careful handling. This
means short finger nails, padded bas-
kets and graders, placing instead of
pouring, proper packing, springed ve-
hicles, and smooth transportation.
Most of these things are well-known,
but difficult to correct or overcome.

An interesting report issued by the
New York and New England Apple
Institute in the spring of 1945, and
still sound, gave eight reasons for
marketing problems during the 1944-
45 season. Of these eight, four were
production problems, as follows:
1. Blind hope that tree-run apples
could be sold readily; 2. Demand only
for apples of size and quality; 3. Lack
of desirable size, color, and quality of
an unusual percentage of the crop;
and 4. Wretched appearance of apples
in many stores.

A recent booklet by the Washing-
ton State Apple Commission, entitled
"Factors Affecting the Condition of
Apples" spends considerable time on
the effect on quality of fertilizers,
pruning, thinning, spraying, and pick-
ing. It is all a part of the new pro-
gram of recognizing that marketing is
a "grass roots" problem.

To summarize, many of the prob-
lems of advertising, marketing, and
merchandising are problems that origi-
nate in the field. The variety, its se-
lection, its adaptability, pruning, thin-
ning, spraying, harvesting, and han-
dling are all important parts of the
movement of fruit to market. The
fruit grower has an ever-increasing
stake in his industry all the way from
the blossom in the spring to the fruit
in the hands of the consumer. He can
lighten his load appreciably by paying
first attention to the marketing prob-
lems which originate in the field.

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PEACHES

APPLES

PEARS

The model 30 test-
er is a recognized
method of testing,
in pounds, the ma-
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pears in accord-
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set forth in circu-
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by the U. S. Dept.
of Agriculture.

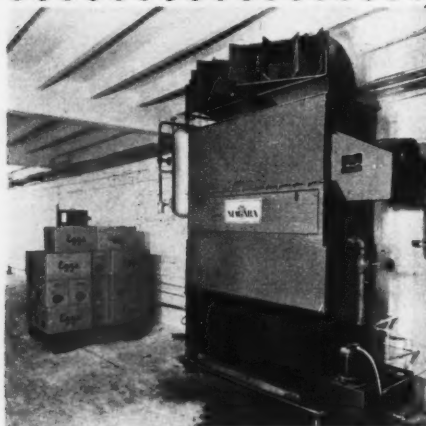
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AIR ENGINEERING EQUIPMENT

NATIONWIDE FRUITS

(Continued from page 15)

However, a warning accompanies Dr. Tukey's recommendations. He says that mulching constitutes a fire hazard and is also a cache for mice that may cause severe damage.

● Neglected apple trees make a fine place for apple maggots to gather. It is in these unsprayed trees that the flies may spend their ten day period after emerging from soil before moving into orchard to lay their eggs.

The problem is to spray regularly to be sure the spray is present when the adult flies are active. If possible, all trees surrounding the apple orchard should be sprayed also. For this purpose Dr. C. R. Cutright of the Ohio Agricultural Experiment Station recommends the use of a spray containing 3 pounds of lead arsenate in 100 gallons of water.

At the same time Dr. R. W. Dean of the New York State Agricultural Experiment Station suggests the use of 2 pounds of a 50 percent wettable DDT spray powder in 100 gallons of water or a 5 percent dust. He says that DDT is a rapid killer particularly well-adapted to killing the apple maggot. Its killing effects last from 10 to 14 days according to tests made at the New York Station. Applications in the second, third, and fourth cover sprays are usually sufficient, but where the problem is more severe, later applications may be necessary.

● Apple trees have been growing and producing fairly good crops for the last several years in Alaska. The best varieties for this climate seem to be Yellow Transparent and the Dolgo crab-apple. The apples are fairly large and well-flavored according to reports in the "Alaska Farmer." It has been suggested that plantings of early hardy varieties might now prove profitable since these other varieties have been found to be productive.

NUTS

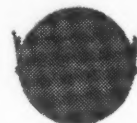
● The chestnut tree is fighting its way back into prominence by overcoming the blight which killed it several years ago. W. E. Jackson of the University of Kentucky reports that trees are growing from the sprouts of trees that were killed by the blight. Some of these trees are now 35 feet tall and 5 inches in diameter.

Jackson believes that the sprouts have developed blight resistance and will survive to make trees again. The disease, at first, killed all the sprouts, but more sprouts grew until they finally overcame the effects of the blight although they still retain its canker.



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Arsenate of Lead

**Micronized* Sulfur
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**50-50-W
(Micronized wettable
powder containing
50% DDT)**

**3% DDT DUST
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**PITTSBURGH
PLATE GLASS COMPANY**

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AT LAST YOU CAN ERADICATE SCAB!

PURATIZED[®] AGRICULTURAL SPRAY

is a remarkable new organic fungicide which not only gives you reliable protection against the ravages of apple scab—it also gets rid of it fast!

For a low-cost spray program and a high degree of scab elimination—get Puratized protection now, with this early spray through the first cover application.

Puratized Agricultural Spray is economical — 1 pint to 100 gallons of spray—and easily handled. Consult your local dealer or write today for full details on this amazingly efficient product!



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GALLOWHUR CHEMICAL COMPANY
NEW YORK, N. Y.

SANTA CLAUS IN JUNE

(Continued from page 11)

fied in the McCloud area. Diseased plants have been pulled up and destroyed; and only the sturdy ones able to withstand drouth, heat, insects, and diseases have been kept.

Berries are planted in 8- to 10-foot rows, plowed, and hoed by hand to keep down weeds. Later comes picking time, followed by pruning out of old wood (since berries are produced only once on new wood). At this time the shoots are trimmed back to make them branch, grow strong, and produce more fruit.

During the war, berries sold as high as \$7 a crate, and probably would have gone higher if there had been sugar. But expenses are up, too, and Marvin Milton, vocational agriculture teacher, figures that it takes 200 hours of labor a year to produce berries in comparison to 40 for cotton.

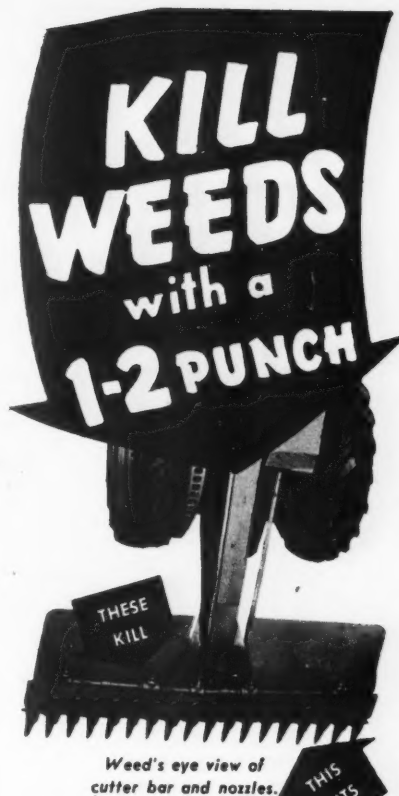
Berries need manure. That means that many growers are turning to livestock; the livestock requires feed, and thus a cycle is begun which results in general, diversified farming with fruit as a foundation—fruit that is raised in small patches with hundreds of growers participating in cash profits.

Ike Barrett, McCloud banker, tells of the cotton farmer who used to come in each year to borrow money. If he made a crop, he paid his debt. One year he wanted to sell his team in order to make good his obligation. He had to have \$100 to \$150 every year and always operated on borrowed money. Then, when blackberries found their market, this man grew them. Two years ago he used \$3,000 of net profits to buy more of that poor upland on which he had almost starved to death. He needed it for pasture for livestock, which had been financed by berries.

At one time Santa Claus came only once a year to McCloud. That was when cotton was harvested. Now he comes twice a year, and the town prospers from its berry profits.

Refrigeration Bulletin

"The Story of My Life—In Storage" by A. Smart Apple is a simple and clear story which should interest all growers who would like to see more profits from their storage apples. Accompanying this story is a non-technical discussion of the Dorex air purification unit manufactured by the W. B. Connor Engr. Co. It explains the principle behind air purification and gives information concerning cost and installation. This bulletin, A-116, may be obtained by writing the W. B. Connor Engr. Co., 114 E. 32nd St., New York 16, N. Y.



**CUT THEM
and KILL THEM
with the**

Cunningham
ESTABLISHED 1838

**SICKLE BAR MOWER
AND WEED KILLER
SPRAY ATTACHMENT**

Here's a machine that gives your weeds a double knock-out blow. It cuts and then sprays them with weed killer in one operation.

Four spray nozzles, directly behind the cutter bar, spray the chemical right down to the center of the freshly cut plants. It reaches all of them.

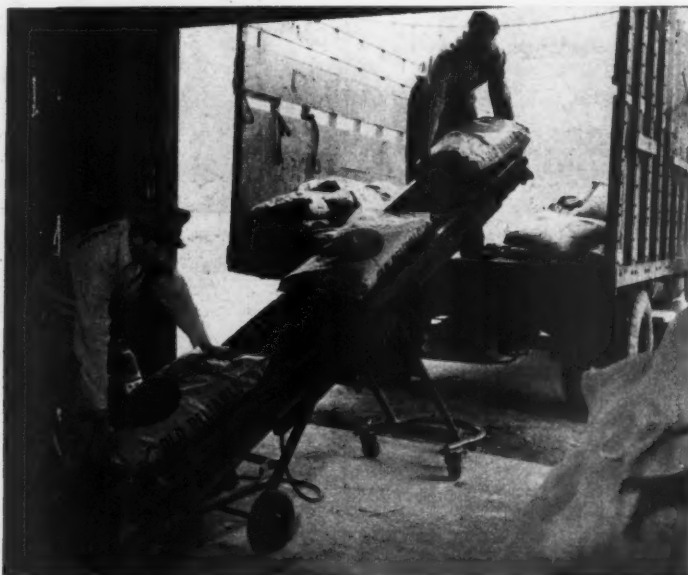
Chemicals are carried in a pressure tank on the handle bar—one fill is sufficient to cover a large area. Spray drift is eliminated by special shields on the trailing edge of the cutter bar. Find out how you can give your weeds the 1-2 punch.

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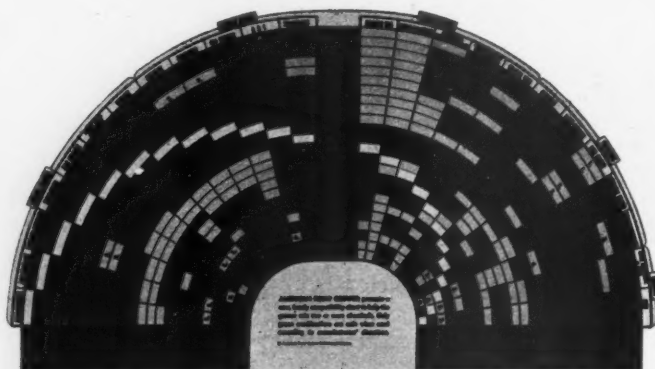
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San Carlos, California

Port Hope, Ont.

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**DON'T
GUESS—
KNOW**



1948 COMPATIBILITY CHART

Again this year, because of the many requests for reprints of the compatibility chart which was published in the February issue of **AMERICAN FRUIT GROWER**, we are printing a limited supply in colors on heavy paper stock and suitable for hanging on the wall.

This revised chart includes all the new insecticides and fungicides and is an accurate guide in mixing two or more chemicals.

Single copies will be furnished free to readers on receipt of 10c to cover postage and mailing.

Fill out the coupon.

**AMERICAN
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1370 Ontario St.
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Enclosed is 10c. Send
Compatibility Chart to:

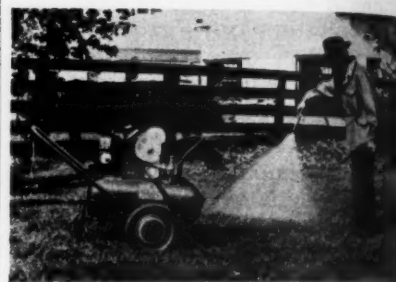
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(Offer Good only in U.S.A.)

NEW

Dimite

It is the end of the road for mites when they come up against Dimite, a new product of the Sherwin-Williams Co. This is a specific killer and kills mites without effecting other pests. In some cases, only one application is necessary for an entire growing season. Foliage on apple, pear, and other trees is safe with Dimite according to results of numerous field tests. It can be combined with water and with most insecticides and fungicides.

"Spartan" Sprayer



The John Bean Mfg. Co. has come up with an all-purpose sprayer designed for the in-between job. Where a hand sprayer is too small and a heavy power sprayer too large, the "Spartan" rolls in on its pneumatic-tired wheels and takes over. There is a 15-gallon supply tank and a 20-foot aluminum extension with a spray gun which can be adjusted for a driving stream or an atomized fog.

Tree Planter

Ten thousand seedlings can be planted a day with the Lowther Tree Planter according to the manufacturer. This planter works successfully in any type soil and completes a planting cycle by lifting the soil, allowing the dirt to fall in around the new seedling, and, finally, packing the earth.

Air Dusting License

For the first time a blanket license has been issued by the Civil Aeronautics Administration for air application of sulfur. Bell Aircraft's Model 47D helicopter received the license after intensive tests were made to be sure that no mechanical or structural features in the plane could cause a sulfur fire or explosion. Thus a new field has been opened up in crop dusting because the helicopters, flying at a speed of 20 to 35 miles an hour, can apply the dust with assurance of complete coverage and penetration.

AMERICAN FRUIT GROWER

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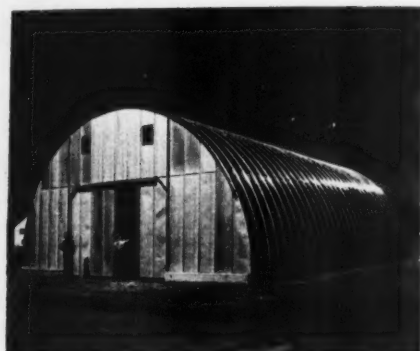
- DIMITE
- "SPARTAN" SPRAYER
- FORK TRUCK

Walking Tractor



The operator of the Earthmaster "walking tractor" can ride comfortably now, since the new riding attachment has been developed for it. The new model, known as SSR, also has a complete line of matching implements. The tractor is known for its tremendous power application made possible by its special transmission which automatically selects the correct power ratio as the load increases.

Alumi-Drome



Neither stormy weather nor blazing sun will affect the versatile Alumi-Drome prefabricated storage building manufactured by the Reynolds Metals Co. The all-aluminum structure is just the thing for implement storage, according to the manufacturer, since it contains no posts, and all floor space is available for use. The building, which will never need paint, can be erected by the purchaser, and is fire-proof and rodent proof.

Fork Truck

• Fast action packed into a small compact unit characterizes the gasoline fork truck being manufactured by the Tract-R-Lift Corp. Where space is limited and aisles are congested, this truck will fill the bill. It can be operated by a single lever hydraulic control and is easy to handle.

JUNE, 1948

The Pick of the PICKERS!

WENATCHEE Fruit Picking Bags

are favored by orchardists the country over. They permit more freedom of action, save labor, prevent loss and pay for themselves many times over in a single harvest.

PREVENT BRUISES and STEM PUNCTURES

The Wenatchee Bag empties from the bottom, has steel frame to keep bag open and adjusts from full to half-bushel size for tender fruits. Sturdily made and fits body comfortably with wide adjustable web suspenders.

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YEARS OF
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CLEAR LAND FAST! Powerful 7-HP motor with friction clutch for safe operation. Cuts down timber, brush and hedge; turn blade vertically and saw logs to length. Also furnished with pest hole diggers. Has clutch pulley for belt work.

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KILL WEEDS, crab grass, Canada thistle, stalks, weeds and roots. Destroy brush, caterpillar nests, dis-
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Sterilize poultry houses, kennels, barns. Use as port-
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Reach to 12 ft. above the floor and stack to 14 or 16 ft. with the Handipiler. Handles boxes, bags and cartons up to 100 lbs. in weight. Compact, light in weight—readily wheeled into confined spaces. Saves lifting—carrying—cuts handling time in half; users report savings of 8 to 10 man-hours in handling time on many jobs. Reversible belt movement, adjustable boom and floor locks are standard equipment. Operates from any convenient lighting circuit outlet.

Write for Bulletin No. AFG-68 today!

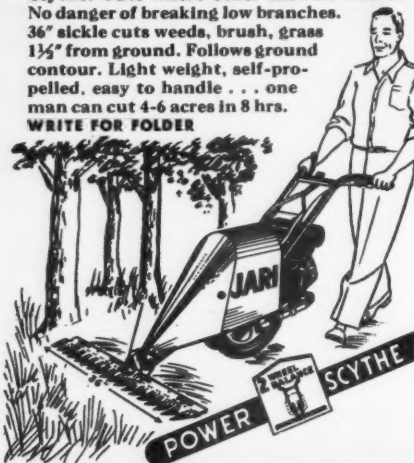
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You can mow close to fruit trees, under fences and in corners with the JARI Power Scythe. Cuts where other mowers won't. No danger of breaking low branches. 36" sickle cuts weeds, brush, grass 1 1/4" from ground. Follows ground contour. Light weight, self-propelled, easy to handle . . . one man can cut 4-6 acres in 8 hrs.
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The AP-PEACH PICKING BAG

Saves Time—Reduces Bruising

Heavy canvas over rigid frame protects fruit. Empties quickly thru bottom. Especially for peaches and easily bruised apples. Write for folder.

JOHN C. BACON CO., GASPORT, N. Y.

Advertisement



From where I sit ... by Joe Marsh

Pampered Farmers

If the folks in our town were less tolerant, they'd be really burned up over that nationally circulated article all about "pampered farmers," describing them as living like kings off the fat of the land.

From where I sit the farmer is anything but "pampered." If he's better off today than he was twenty years ago it's because he's worked long and hard to improve the quality and quantity of his production.

Take Bert Childers, for example. Bert is up at four in the morning, to get the milking finished—and

ploughing or harvesting, depending on the season, until sundown. In the evening he finally relaxes with the missus over a moderate glass of beer.

And the farmer today's not only *temperate* in his habits, like Bert's evening glass of beer . . . but *tolerant* in his opinions. So he'll probably say of that article, "somebody got the facts wrong," and just let it go at that.

Joe Marsh

Copyright, 1948, United States Brewers Foundation

APS HISTORY OF HORTICULTURE

HISTORY OF THE BARTLETT PEAR

By STANLEY JOHNSTON
South Haven Experiment Station

DISCOVERED by chance nearly 200 years ago, Bartlett still reigns supreme among pear varieties.

This splendid variety was discovered in a woods near Aldermaston, Berkshire, England, one summer's day late in the eighteenth century by a schoolmaster named Stair. The exact date is not known. Mr. Stair sampled the ripe pears, liked them, and later propagated the variety. It is still known as Stair's pear at Aldermaston.



This outstanding Bartlett pear tree has yielded 56 bushel crates of fruit in one season. Standing beside it is the late Peter Broe of Fennville, Mich., in whose orchard the tree grows.

The variety was obtained from Stair by a Mr. Williams, a nurseryman, who propagated and distributed it under his own name. It is known in England and Europe by the name of Williams' Bon Chretien.

It was brought to this country in 1797 or 1799 by James Carter of Boston for Thomas Brewer, who planted the variety in his orchard. The Brewer estate was bought in 1817 by Enoch Bartlett of Dorchester, Mass. Bartlett observed the new va-

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Service ANYWHERE

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When CLINTON Powered

4 CYCLE 2 POWER RANGES
AIR-COOLED 1½ to 2 H.P. • 2½ to 3 H.P.

CLINTON MACHINE CO.
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TRESCOTT
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No. 202 PEACH MACHINE

Designed to speed sizing, grading and defuzzing of peaches and cleaning of pears for top market prices. Rugged and trouble-free. Bolted assemblies permit space-saving set-ups and flexibility for particular job at hand, big or small. Write for literature.

Apple and Potato Brushers, Graders

THE TRESCOTT
COMPANY, INC.
FAIRPORT, N. Y.

FRUIT TREES Planters Graders Planters
Prices. Peach, Apple, Pear, Plum and Prune, Cherry. Write for Prices. Drop a card for Free copy of our catalog.
CHAMPION NURSERIES
150 MAIN STREET • PERRY, OHIO

JUNE, 1948

riety, and not knowing its true name, allowed it to be distributed under his name. Accordingly, the variety has been known in this country as Bartlett.

Living under three names has apparently been no serious handicap to the variety. It is now the leading variety, by a wide margin, in the major pear producing regions of the United States and Canada. In many places only enough trees of other varieties are grown to serve as pollinizers. Its closest rival in number of trees probably would be Kieffer, which is grown to a considerable extent in states where pear blight prevents the growing of many varieties of higher quality.

Bartlett has many excellent characteristics, chief of which is its ability to succeed in a wide range of soil and climatic conditions. The tree is vigorous and productive, although rather susceptible to attacks of pear blight. The fruit is of good size, shape, and appearance. It is unexcelled for commercial canning. The flavor is good, but it is surpassed as a dessert pear by a number of other varieties which are not as good in other respects.

Marshall P. Wilder said at an American Pomological Society meeting in 1885, "When we consider that the art of crossing varieties for their improvement was scarcely known until our day, and see what wonders have been accomplished by it, who can doubt that we may yet produce a pear with the richness of the Seckel, the form and size of the Bosc, and the vigor and productiveness of the Boussock."

Wilder was aiming very high. His ideal has not been reached, and probably will not be for many years. In the meantime, fruit breeders would be very happy to find a variety of the Bartlett type having a tree somewhat more resistant to blight, and fruit with a red blush and a little better flavor. Meanwhile, Bartlett will no doubt continue to occupy the first position among pear varieties.

N. Y. ENTOMOLOGIST IS MOURNED

THE DEATH in March of Prof. S. Willard Harman, research entomologist at New York State Agricultural Experiment Station, Geneva, means a real loss to the fruit industry. He had done important work for the industry through his research on codling moth control and his more recent work with the red-banded leaf roller.

He was graduated from Michigan State college and received his M.S. degree from Cornell university. He joined the staff of the Geneva Station in 1922 as an assistant in research.



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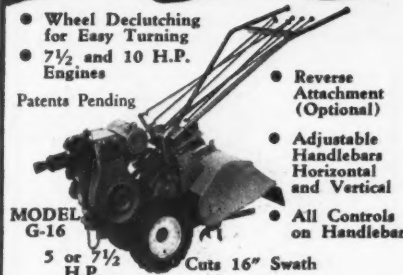
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AMERICAN FRUIT GROWER

NEW BULLETINS

Many publications of the state agricultural colleges and experiment stations contain information of interest to fruit growers from other states. Frequently these bulletins may be obtained by writing the Director of Publications of the college or experiment station concerned.

● **Growing Fruit for Home Use** (Ext. Bul. 45, 1945) U. of Del., Newark, is a complete discussion of factors involved in home fruit plantings in Delaware from selection of variety to harvesting.

● **Fruit Varieties** (Bul. 430, Rev. 1946) Ontario Dept. of Agr., Toronto, lists recommended varieties as suggested by growers for planting in Canada.

● **Identification of Blueberry Varieties by Plant Characters** (Bul. 431, 1946) Mass. State Coll., Amherst, notes the characteristics which will identify various varieties of blueberries.

● **Indiana Peach Production** (Ext. Bul. 322, 1946) Purdue U., Lafayette, Ind., is a complete discussion of all phases of Indiana peach growing.

● **California Bartlett Pears Economic Status, 1946-47** (Circ. 368, 1947) Coll. of Agr., U. of Cal., Berkeley, is a report of the trends in production, consumption, and price of Bartlett pears in California.

● **The Home Fruit Planting** (Ext. Bul. 255, 1947) U. of Minn., University Farm, St. Paul, gives cultural requirements for each of the commonly grown fruits in Minnesota.

● **Chemical Control of Weeds in Oklahoma for 1948** (Circ. C-128, 1948) Okla. Agr. Exp. Station, Stillwater, recommends tentative methods for controlling weeds with chemicals in Oklahoma.

● **Peach Culture in Missouri** (Bul. 455, 1942) U. of Mo. Coll. of Agr., Columbia, gives in detail recommended cultural practices for peach growing in Missouri.

● **Strawberry Production in Colorado** (Bul. 391-A, 1946) Colo. A & M Coll., Fort Collins, is a brief discussion of all phases of producing strawberries in Colorado.

JUNE, 1948

DON'T CALL IT "THE JONES PLACE!"

By ALICE M. WOODY

IS YOUR ORCHARD known only as the "Smith Orchard," or the "Jones Place?" If so, why not give it a more interesting name?

On the east shore of Flathead Lake in Montana, a place known for its scenic beauty and fine sweet cherry and McIntosh apple orchards, the owners take pride in the appropriate and colorful names for their property. Usually these names are given for certain reasons such as Manybrooks. When this tract of land was first homesteaded, 18 brooks cascaded down the hill; thus, it was given its name. Across the highway, perched on a rocky hill, stands a picturesque, modern little home called Bloomin' Rocks. Two families of Robbins live at beautiful Robbinwood. The splendid orchards of Cherry Hills spread to the mountains.

Singing Brook Farm, an orchard, takes its name from the tumbling brook which hurries through it to join the lake. Long Look carries the eye to the distances across the lake, and Blue Water looks down into the lake's clear depths. Other names are: The Pines, Singing Hill, The Poplars, Murmuring Pines, and many others.

One orchardist when asked why he did not name his place replied that he would when the proper time came, and the name would be Dunwurkin.

C. O. BRATLEY DIES SUDDENLY

DR. C. O. BRATLEY, an outstanding pathologist in the fruit and vegetable industries, and Assistant to the Administrator of the Research and Marketing Act, died suddenly on May 9. He was the author of the article, "What Does the Research and Marketing Act Mean to the Fruit Grower," which appears in this issue of AMERICAN FRUIT GROWER.

Dr. Bratley was formerly with the Bureau of Plant Industry, Soils, and Agricultural Engineering where he was in charge of handling transportation, storage, and disease investigations of fruits and vegetables in the New York City Laboratory.

He was a graduate of the University of Florida and had his Doctor's degree from Cornell University. He was a Fellow of the American Association for the Advancement of Science, a member of the American Phytopathological Society, the American Society for Horticultural Science, and the American Society of Refrigeration Engineers.

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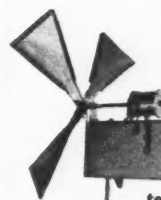
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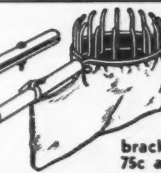
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M. J. Beck Co., Box 7, Lansing 1, Mich.

Ramblings

OF A HORTICULTURIST

Springtime Reverie

BLOSSOM TIME is a season when a man often finds himself drifting off into day dreams if he isn't careful. The orchard air is warm and fragrant, and the quiet droning of the bees makes a fellow want to doze. His eyes grow heavy as he rests for a moment, propped up against a tree trunk. Finally the lazy warmth overcomes him, and he falls asleep.

Perhaps in his dreams the sleeper slips back through the years, and finds himself taking part in an episode of the old days that he had been told of as a child. He becomes Benjamin Brown in his orchard near Philadelphia—way back in 1800. It is July, and Ben is showing one of his friends around the place. They inspect a fine planting of pears when suddenly the friend stops to point to some blighted trees and says, "What's the matter with those trees over there, Ben; they look dead and burnt!"

"Well, Sir," Ben replies, "that's Blight. They tell me it's something that came from up Hudson Valley about 1780, and now it's spreading all over the country.

"But what causes this sickness, Ben?" his friend asks.

"Well now that's a good question," Ben replies, tilting his hat and scratching his forehead. "They say it's a kind of apoplexy that comes from a surcharge of electric fluid. Sounds like some of old Ben Franklin's talk.

"There doesn't seem to be much we can do, but we keep trying. The main thing is to get the floating electric fluid to the ground quickly so it won't hurt the tree, I guess; so we put our old buggy tires, horseshoes, wire, and just any kind of iron in the trees to bring the electric fluid out in a hurry."

"Does it work?"

Ben scratches his head more violently and says, "You know, that's just what's bothering me; it isn't working as well as we'd like it to. We've tried it on some of the trees, and sometimes it seems to work and sometimes it doesn't."

With that, the sleeper gives a snort, and the spell of the dream is broken.



Photo by Parks, Standard Oil Co. (N.J.)

However, as so often happens when one sleeps fitfully, he drops back into another dream and plays another part in another story that has been told him long ago.

This time he is a peach grower near Benton Harbor, Mich., about 1867. He has discovered a tree in his planting that is different from all others of the variety. It ripens its dark-colored fruit earlier than the others, and the foliage is of a lighter color. He is delighted with what he thinks is a new and valuable variety, and invites nurseries to propagate it for wider dissemination. In a few years, Berrien County is heavily planted to this new "variety," and a beautiful harvest is only a few years

off. But just before it's time for the trees to bear, nearly all of them die. They are all infected with the virus disease Peach Yellows, and he has mistaken them for trees of a new variety, thus unknowingly spreading the disease over a wide area.

With a start the sleeper opens his eyes, and realizes what has happened. It has been a long time since he's heard those stories, and his part in them seemed so real it's hard to shake off the dreams. But he shrugs and wonders if he and his contemporaries will seem as ridiculous to future generations as Ben and the foolish peach grower seem today. Then he stretches, yawns, and goes back to work.—E.S.B.



The Governor of California *invites You*



EARL WARREN
GOVERNOR

State of California
GOVERNOR'S OFFICE
SACRAMENTO

To American Industry:

In California we are currently celebrating the centennial anniversaries of the beginnings of our State. We gain much inspiration from our review of the progress which has been made in the comparatively short span of one hundred years.

During the past eight and one-half years alone California's population has increased by 47 per cent and our industry and agriculture have risen to positions of great importance in the economic life of the nation.

Our tremendous reserves of natural resources and our strategic world trade position on the shores of the Pacific Basin assure California's continued progress in the years to come.

I am happy, therefore, to join in inviting you to investigate the opportunities for expansion which exist in the many communities of our State.

Sincerely,

Earl Warren
Governor



Earl Warren

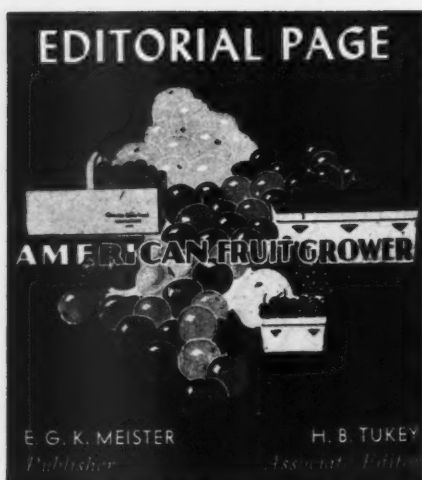
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*Address Industrial Department, Union Pacific Railroad
Omaha 2, Nebraska

UNION PACIFIC RAILROAD

Road of the Daily Streamliners



Marketing Deserves More Emphasis

THERE IS a good deal of inspiration, as well as common sense, in the old story that he who builds a better mousetrap will have the world beat a path to his door. Of course, the application of this characteristically American bit of philosophy to fruit growing is that the grower who delivers high quality fruit to the consumer will never suffer for want of buyers. And therein lies the crux of marketing problems today which encompass all factors in growing fruit: from spraying and thinning right on through packaging, transportation, and selling.

This issue of *AMERICAN FRUIT GROWER*, somewhat generously labeled "Fruit Marketing," cannot possibly touch upon all the multiple and varied factors which make up the process of marketing. But we have attempted to make clear that marketing is no more a single activity than is production, and that successful marketing is based on high-quality production.

At the same time, since research on the inter-related factors of marketing has lagged behind the great mass of work done on production problems, we have brought you the article by C. O. Bratley concerning the Research and Marketing Act, which is important legislation seeking to correct the lack of research on packaging, grading, consumer preferences, wholesaling, retailing, etc.

Production and marketing are the two broad divisions of this business of fruit growing, and both are of equal importance; yet the majority of growers traditionally has expressed only a passing interest in marketing. Marketing meetings have been poorly attended compared with meetings on spraying, and other factors of production. Today, however, a long-overdue interest in marketing presages substantial improvements to come.

Let's Help Millers Push Home Baking

THE BREAD BAKED in large commercial bakeries will never equal the tasty fresh loaf that comes out of the kitchen stove. Home baking, however, continues to decline. Only pie, a favorite dessert of Americans, remains to bulwark the fading home business of flour millers because it is a lure and a talent in which the housewife still delights. Quick to note this opportunity, the millers have re-entered the home with new and easy pie making ideas such as "Pyequick" and "Pye crust" mixture.

Fruit in pies is a natural combination and as the national advertising of the big flour millers appears in the leading magazines, the demand for delicious fruits grows. We welcome the flour millers and pledge them our help in pushing home baked pies.

More Proteins For Apples

WHEN YOU COME to a worm in an apple, keep on eating, says a western university professor, because the concentration of proteins in a worm exceeds that in an apple. We wonder if the professor can find a worm in an apple during this age of DDT and other high-powered worm-killing chemicals. We must confess that we eat apples, not for high protein content, but because apples taste so good and also because they are chock full of vitamins and minerals. Let our professor, along with the French and African natives, enjoy his worms and snails. We'll take our apples the way the good Lord meant them to be—crisp and juicy *all* the way through!

Fruit Production at a Glance

	1936-45	1946	1947
Apples bushels	112,896,000	119,410,000	112,503,000
Peaches bushels	62,936,000	86,643,000	82,981,000
Pears bushels	29,510,000	34,447,000	35,350,000
Grapes tons	2,578,920	3,119,500	3,093,800
Plums and Prunes tons (fresh)	707,660	791,000	672,300
Cherries tons	159,157	229,620	180,830

CITRUS

	1936-45	1946-47	May 1, Est. 1947-48
Oranges boxes	83,488,000	113,980,000	109,960,000
Grapefruit boxes	44,593,000	59,640,000	60,860,000



Labor and Management Share Responsibility

FRUIT GROWING has been relatively free from labor troubles. This is due, in part, to the fact that much of farm labor is family or community effort. The owner and the labor may be one and the same. Personal acquaintance and interest are common. Such a situation is not easily organized and does not listen long or well to professional agitators. With their feet on the ground and an interest in the job they are doing, workers do not readily succumb to the harangues of malcontents.

But, in areas where fruit growing has become big business, this personal touch is often lost. Transient and seasonal workers may be the chief source of help, and there is an increasing tendency to think of orchard labor as a machine which is set in motion at certain seasons. It is forgotten that the "labor" consists of individual men and women—each with his own ideas and feelings. Under these conditions, little dissatisfactions and petty grievances that naturally arise in any undertaking are easily inflamed by those who know how to take advantage. It is this that has happened here and there about the country, principally on the Pacific coast. That it has not become a major problem speaks well for both labor and management.

But now come more frequent rumblings suggesting that it is time to look into any possible difficulties and get them straightened out before they occur. In this, management has a responsibility. It must provide proper housing, modern conveniences, and all of those little things that show labor that management has its best interests at heart. Admittedly, there have been abuses here. Some of the worst slum problems are agricultural.

On the other hand, labor, too, has a responsibility. If it has fair complaints, it should bring them to the attention of management. It should distinguish between its friends and false leaders who foment strife for their own selfish ends. Nothing is to be gained by fighting. The fruit industry has too many troubles of its own right now. Problems should be brought to light by means of intelligent discussion on both sides. They should be brought forth immediately before either side has time to brood over them and let the sparks of hatred smoulder. Unwelcome labor trouble could put some sections promptly out of business, with everybody the loser.

The times call for level heads and clear thinking, in which both management and labor share responsibility.

AMERICAN FRUIT GROWER

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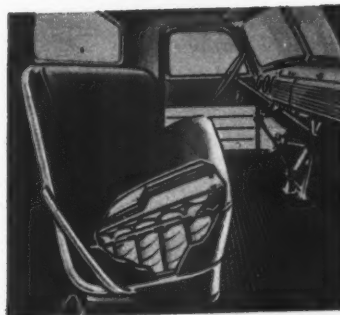
GMC"



**"It's the Easiest Driving,
Smoothest Riding, Best Looking Job on the Road"**

Men who drive trucks and *know* trucks are saying "Make mine the new GMC" because of the extra comfort and convenience, stamina and safety, new light and heavy duty GMCs provide. New cabs are larger and roomier than ever before. They have wider, deeper seats . . . higher, broader windshields and windows . . . a unique new fresh air circulation system . . . dome light, package compartment, ash tray, dual windshield wipers, provision for radio. Chassis are stronger and sturdier . . . engines are of powerful, dependable "Army Workhorse" design. More than ever GMC, The Truck of Value, is the favorite of truck operators.

GMC TRUCK & COACH DIVISION • GENERAL MOTORS CORPORATION



New, tubular frame, adjustable seats give 8" more seating width . . . have 73 individually wrapped springs.



New, built-in ventilation system draws in fresh air, forces out used air . . . provides for fresh air heating.

THE TRUCK OF VALUE

**GMC
TRUCKS**

GASOLINE • DIESEL

JUNE, 1948



**"How much of
your profit
goes to Red Mite?"**

DN-111 and *DN-Dust D-4* still remain the best red mite controls available to apple growers. Red mite has become the number 1 problem in many apple sections. Don't let them take over. Spray with *DN-111* or dust with *DN-Dust D-4* during the summer months when mites do their greatest damage.



CLEAN FRUIT SELLS

Summer applications of either *DN-111* or *DN-Dust D-4* in apple orchards have held average mite population to less than one mite per leaf! It helps keep leaves green and active—favors development of larger, more highly

colored apples.

The elimination of red mite injury greatly reduces the dropping of immature apples, and most growers find that harvest sprays are usually much

more effective on trees so treated.

Consult your state experiment station or qualified dealer. Be ready to start spraying as soon as mites are seen—before foliage appears bronzed.

Watch your trees

DN-111* • *DN-DUST D-4

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